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WORLD CLASS FIRE SOLUTIONS

Fire Detection Equipment

apollo

PRODUCT LIFETIME GUARANTEE

Product Catalogue 2013/2014

Apollo Key Guide

Quick reference key guide

Applications

Bedrooms	Escape Routes
Small to Medium Buildings	Hospitals
Data Centres	Retail
Churches	Marine
Refineries	

Dusty Environments	Car Parks & Loading Bays
Large Hotels	University Campuses
Restaurants	B&Bs / Guest Houses
Large Vessels	Hazardous Areas

Medium to Large Buildings
Clean Rooms
Listed Buildings
Offshore Platforms

Product Types

Optical	Heat	Ionising	Carbon Monoxide	Multi-Sensor

Product Highlights

New Product

Fire Type

Fast Burning Flaming	Slow Burn Smouldering

Product Features

Waterproof	Wireless	Reduced False Alarms	Easy Installation	5 Response Modes

Remote Test Feature

Apollo Product Guide

Quick reference product guide

	DISCOVERY®	XP95®	orbis®	series 65® 9-33V	AlarmSense®	XPANDER®
	22 / 118 / 152	32 / 140 / 154	42 / 126 / 146	48 / 157	56	64
bedrooms	●	●				
escape routes		●				
dusty environments			●			
car parks & loading bays		●				
medium-large buildings	●	●				
small-medium buildings			●	●	●	
hospitals	●					
university campuses	●					
retail			●	●		
restaurant			●	●	●	
b&b / guest house					●	
listed buildings						●
churches						●
marine	●		●			
large vessels	●		●			
hazardous areas		●	●			
refineries		●	●			

Apollo Accreditation

Apollo products are certified in a global arena to meet the most exacting standards set by both our customers and the dynamic and challenging environments in which they are designed to operate. Apollo holds in excess of 3000 product approvals worldwide. Our products are stringently tested to international land and marine based standards. The company is quality certified by LPCB to ISO9001:2008 and ISO14001:2004 for our Environment Management System. Apollo's continuous improvement programme ensures that our products will always be designed to meet the ever changing strict criteria set by the worldwide approval bodies.

LPCB   VdS   Ex   CE   CE 0832 1180   CE 0832   CE 0333   CE 0359 (Part 25)   CE 0786

Germanischer Lloyd   mca Maritime and Coastguard Agency   CCS CHINA CLASSIFICATION SOCIETY 中 国 船 级 社   ABS TYPE APPROVED PRODUCT   BUREAU VERITAS   Lloyd's Register TYPE APPROVED   DNV

CAL FIRE SINCE 1980   MARYLAND STATE FIRE MARSHAL   SIGNALING UL LISTED   ULC LISTED   FM   NYC BUILDINGS

! Need further assistance? Ask our specialist at www.apollo-fire.co.uk

Fire Detectors

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XP95 32

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Welcome to our updated full product catalogue for 2013/2014. We are pleased to add a number of new products including a new range of Apollo manufactured Manual Call Points and Part 23 Approved VADs. Our industry specialists here at Apollo have been serving the fire detection industry for over 33 years and we look forward to working with you to maintain our world leading position over the next 33 years and beyond.

Warren Rees

Managing Director
Apollo International
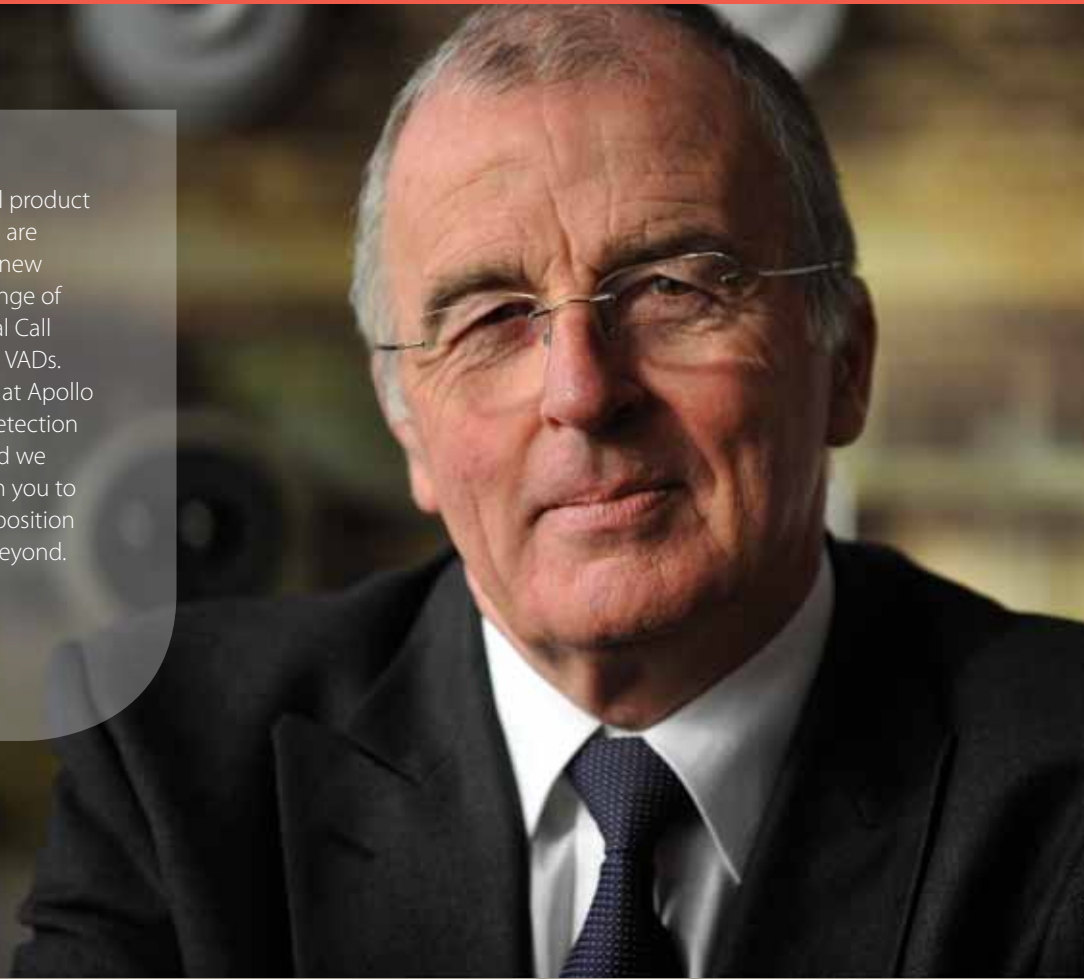
UK MANUFACTURER
AN ESTABLISHED UK MANUFACTURER, CORE MANUFACTURING FACILITY IN HAVANT, HAMPSHIRE

LIFETIME GUARANTEE
THE GUARANTEE SUPPORTS OUR RECOMMENDED WORKING LIFE OF THE PRODUCT

LOCALISED CUSTOMER SERVICE
REGIONAL OFFICES IN UK, GERMANY, AMERICA AND CHINA OFFERING AFTER SALES SUPPORT WORLDWIDE

FREE TRAINING COURSES
OFFER A SERIES OF ONE-DAY TRAINING COURSES INCLUDING CPD TRAINING SEMINARS

INTERNATIONAL APPROVALS
APOLLO HOLDS IN EXCESS OF 3,000 PRODUCT APPROVALS WORLDWIDE

Visit the Apollo website for detailed information on our range of fire detection products.

Welcome to the 2013 Apollo Catalogue

In addition to detailed product listings you'll also find information on the additional services we offer, case study examples of the products in situ and an easy-reference product index.

View our case studies for examples of Apollo products in situ

By Appointment to
Her Majesty The Queen
Manufacturers of Fire Detection & Alarm Products
Apollo Fire Detectors Limited
Hampshire

Information in this catalogue is given in good faith, but Apollo Fire Detectors cannot be held responsible for any omissions or errors. The company reserves the right to change specifications of products at any time without prior notice.

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Catalogue Features

Icons

These icons will guide you through the ranges and assist you in selecting the most suitable product for your specific application.

Case studies

Throughout the catalogue you will see a selection of case studies; these will show you the different kind of applications our products can be installed in.

New products

A number of new products have been added to this edition of the catalogue. Each new product has been highlighted with the 'NEW' icon.

A list of new products can be found on the next page.

Approval Feature

On the inside front cover you will see our full range of approvals that we hold for our different product ranges.

Visit the Apollo website for detailed information on our range of fire detection products.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

New products

Products released from April 2013-October 2013.

Product description	Product range	Part number	Page number
Apollo Discovery Manual Call Point	MCP	58200-910	30
Apollo Discovery Manual Call Point with Isolator	MCP	58200-908	30
Apollo Waterproof Manual Call Point	MCP	58200-950	30
Apollo Waterproof Manual Call Point with Isolator	MCP	58200-951	30
Apollo XP95 Manual Call Point	MCP	55200-905	38
Apollo XP95 Manual Call Point with Isolator	MCP	55200-908	38
XPander Combined Sounder and Optical Smoke Detector	Wireless	XPA-CB-14016-APO	70
XPander Combined Sounder and Heat Detector (Class A1R)	Wireless	XPA-CB-14017-APO	70
XPander Combined Sounder and Heat Detector (Class CS)	Wireless	XPA-CB-14018-APO	70
XPander Combined Sounder and Multisensor Detector	Wireless	XPA-CB-14019-APO	70
XPander Combined Sounder Visual Indicator (Red) and Optical Smoke Detector	Wireless	XPA-CB-14020-APO	70
XPander Combined Sounder Visual Indicator (Red) and Heat Detector (Class A1R)	Wireless	XPA-CB-14021-APO	70
XPander Combined Sounder Visual Indicator (Red) and Heat Detector (Class CS)	Wireless	XPA-CB-14022-APO	70
XPander Combined Sounder Visual Indicator (Red) and Multisensor Detector	Wireless	XPA-CB-14023-APO	70
XPander Combined Sounder Visual Indicator (Clear) and Optical Smoke Detector	Wireless	XPA-CB-14024-APO	70
XPander Combined Sounder Visual Indicator (Clear) and Heat Detector (Class A1R)	Wireless	XPA-CB-14025-APO	70
XPander Combined Sounder Visual Indicator (Clear) and Heat Detector (Class CS)	Wireless	XPA-CB-14026-APO	70
XPander Combined Sounder Visual Indicator (Clear) and Multisensor Detector	Wireless	XPA-CB-14027-APO	70
XPander Combined Sounder and Detector Base	Wireless	XPA-WB-14036-APO	70
XPander Combined Sounder Visual Indicator (Red) and Detector Base	Wireless	XPA-WB-14037-APO	70
XPander Combined Sounder Visual Indicator (Clear) and Detector Base	Wireless	XPA-WB-14038-APO	70
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Cat O. Discovery Sounder VAD Base with Isolator	VADs	45681-700	92
Cat O. XP95 Sounder VAD Base with Isolator	VADs	45681-705	92
Cat O. XP95 Sounder VAD Base Slow Whoop with Isolator	VADs	45681-706	92
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Cat O. XP95 VAD Base with Isolator	VADs	45681-709	92
SL-DAA Ionisation Analogue Addressable Duct Smoke Detector	UL/ULC/FM	SL-DAA-N	156
SL-DAA Photoelectric Analogue Addressable Duct Smoke Detector	UL/ULC/FM	SL-DAA-P	156
SL-DA4R Ionisation Analogue Addressable Duct Smoke Detector	UL/ULC/FM	SL-DA4R-N	156
SL-DA4R Photelectric Analogue Addressable Duct Smoke Detector	UL/ULC/FM	SL-DA4R-P	156
SL-2000 Ionisation Conventional Duct Smoke Detector	UL/ULC/FM	SL-2000-N	159

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New
products cont.

NEW

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SL-D2W Ionisation Conventional Duct Smoke Detector	UL/ULC/FM	SL-D2W-N	159
SL-D2W Photoelectric Conventional Duct Smoke Detector	UL/ULC/FM	SL-D2W-P	159
RT-3000 Ionisation Weatherproof Duct Smoke Detector	UL/ULC/FM	RT-3000-N	159
RT-3000 Photoelectric Weatherproof Duct Smoke Detector	UL/ULC/FM	RT-3000-P	159
HS-100 Ionisation Special Application Duct Smoke Detector	UL/ULC/FM	HS-100-N	159
HS-100 Photoelectric Special Application Duct Smoke Detector	UL/ULC/FM	HS-100-P	159
Multi-Flex Analogue Addressable Detector Sounder Base	UL/ULC/FM	MB-SDRT-AA	171
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Multi-Flex Synchronisation Module - Metal 2-Gang Mounting Chassis with White Wall Plate Cover	UL/ULC/FM	MB-SDRT-SM/G	171
Multi-Flex Synchronisation Module - Metal 2-Gang Mounting Chassis with Red Wall Plate Cover	UL/ULC/FM	MB-SDRT-SM/G/R	171
Multi-Flex Synchronisation Module - Low-Profile Snap-Track with Provided Mounting Screws	UL/ULC/FM	MB-SDRT-SM/T	171
Multi-Flex Synchronisation Module - Grey ABS Cover, 18Ga. CRS, Plated with ó" Conduit Knockouts, Top and Bottom	UL/ULC/FM	MB-SDRT-SM/C	171
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Coming soon

Cat C. Loop-powered VAD 15m (Red)	VADs	55000-740	93
Cat C. Loop-powered VAD 8m (Red)	VADs	55000-742	93
Cat C. Loop-powered VAD 15m (White)	VADs	55000-743	93
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Module Base	VADs	38531-822	93

Visit the Apollo website for detailed information on our range of fire detection products.

Technology
Solutions

OpenConnect

The OpenConnect product is designed for direct connection of BMS (Building Management System) to a fire control panel supporting the Apollo devices. It provides an off-the-shelf solution for a fast, documented implementation.

For more information see the OpenConnect site: www.open-connect.co.uk

Part numbers available on request.

ALM's

The Apollo Loop Module (ALM2) provides various combinations of Apollo device loop managers and output circuits for use with Apollo XP95A and Discovery devices. Supporting up to two power limited initiation circuits of 126 devices per loop, the ALM2 is designed to access, configure, control and monitor each device and report event statuses as they change in a real-time environment. Additionally, the ALM2 can provide two output circuits, each designed to work as a general purpose output, releasing output or a Notification Appliance Circuit.

Part numbers available on request.

An introduction to Apollo

Why choose Apollo?

■ Largest independent smoke detector manufacturer in the world

■ Certified to all key international approvals

■ Product Lifetime Guarantee

■ The best people work for Apollo

■ Trust, integrity & support

■ Localised customer service worldwide

■ Ex-stock delivery

■ 100% reliability, 100% tested

■ Open, digital protocol

■ Forwards and backwards product compatibility

■ World-class fire solutions

Partner of choice

Apollo Fire Detectors Ltd has specialised in the design and manufacture of high quality fire detection products since 1980. In that time, the company has broadened its capability from a straightforward focus on conventional fire detectors to include the manufacture of sophisticated analogue addressable detectors and interfaces for monitoring and controlling equipment in fire protection systems.

Apollo applies the most modern production techniques and has invested in sophisticated manufacturing equipment to ensure consistent high quality products and fast response to customer requirements. Through planned expansion, Apollo has reached a leading global position in the market for professional fire detection. With over 3000 international approvals, regional offices in America and China, along with direct trade into more than 100 countries, Apollo has cemented its position as a world-class fire solutions provider.

Apollo is part of the Halma group of companies. Halma is a FTSE top 250 listed PLC with over 40 subsidiaries worldwide, all engaged in specialist engineering activities.

World-class

A world-class fire solutions provider, Apollo have regional offices in America and China and trade directly into more than 100 countries.

Visit the Apollo website for detailed information on our range of fire detection products.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

World-class facilities

Apollo's on-site manufacturing facility is capable of producing over 50,000 detectors a day and a great deal of care is taken to ensure that each and every detector meets the very highest of standards.

As part of our commitment to continue to meet the required high standards and remain a world leader, Apollo have invested heavily in extensive product testing facilities, where a suite of tests are carried out to ensure our products will withstand even the most rigorous of real-life situations.

We have recently added an anechoic chamber and validation laboratory to our testing facilities.

An anechoic chamber is a room designed to absorb ambient noise and stop reflections of sound, so that accurate sound testing can take place inside it.

A validation laboratory is the final step in the development of fire detection technology, to ensure that devices will work in every environment and scenario that they might face.

Anechoic chamber

The chamber absorbs ambient noise for accurate sound testing.

Product Lifetime Guarantee

Our products save lives and protect property around the globe from the risk of fire; a huge responsibility and one we take very seriously.

Our Product Lifetime Guarantee provides a warranty on our products, which for detectors is 10 years (CO detectors, 5 years).

The guarantee supports our recommended working life of the product and further endorses our commitment to our customers in providing them with reliable, quality fire detection products.

Apollo acknowledges the importance of life safety and system integrity and recommends the routine replacement of detectors after 10 years.

The Product Lifetime Guarantee is subject to terms and conditions. For further information, please refer to Apollo's General Conditions of Sale which can be found on pages 186-187 or on the Apollo website.

Additional services

Servicing & disposal

Apollo offers a service facility for Apollo detectors and ancillary products, such as interfaces and manual call points. This means that older models of Apollo detectors can be serviced (subject to them being within their recommended working life).

The following services are offered:

- Detectors can be cleaned and recalibrated so that they work within the same limits as newly manufactured detectors

- Manual call points and XP95 interfaces can be cleaned and tested to ensure that they are still functioning within manufacturing limits

- Equipment which is found to be Beyond Economical Repair (BER) or is older than its recommended working life can be disposed of – a small charge is made for this service to cover the cost of investigation and disposal

For further information please contact the Service Department on +44 (0) 2392 492 412.

Loop Calculator

The Apollo Loop Calculator is a free computer programme used to establish the viability of a design. It enables engineers to calculate the total loop loading in a proposed Discovery or XP95 fire detection system by inputting relevant variables. This may include control equipment, loop devices and cable length and type. Parameters are included for Apollo protocol compatible panels.

Please see the Apollo website for more details: www.apollo-fire.co.uk/loop-calc

SimSystem

SimSystem (29600-164) is a tool for simulating loops of detectors and interfaces in order to demonstrate a system and prove the design without having to connect actual products to a control panel. SimSystem consists of a software programme which features an intuitive graphical display and an interface which runs up to four loops. A maximum of two interfaces can be connected, allowing a system of up to eight loops to be simulated.

Specifiers' Guide

Apollo has created a guide as an aid for use by all who have responsibility for specifying or designing systems incorporating automatic fire detectors. The guide is to assist in design and specification of fire systems.

Please see the Apollo website to obtain your copy of the guide: www.apollo-fire.co.uk/specifiersguide

Visit the Apollo website for detailed information on our range of fire detection products.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Training

Apollo offers a series of one-day training courses for its customers.

The courses cover the following modules:

Course A

- Detection Principles and Device Selection
- Conventional Detector Operation
- Analogue Addressable Principles
- XP95
- Discovery

Course B

- Carbon Monoxide (CO) Fire Detection
- AV Alarm Devices
- AlarmSense
- Orbis
- OpenConnect

Course C

- XPander – for commissioning and installation engineers

Course D

- Service, Test and Maintenance

In addition to the standard training courses, Apollo can offer tailor-made courses if required. The majority of courses are held at Apollo's International office in Havant, UK, but on-site training is also available.

You can find out more about Apollo's training days and book your place by visiting www.apollo-fire.co.uk/training

CPD seminars

CPD CERTIFIED
Construction CPD Certification Service

Apollo now offers training seminars that will count towards your Continuing Professional Development. These free sessions on fire industry-related topics allow you to stay up to date.

False Alarm Reduction in Automatic Fire Detection Systems – the Manufacturer's Contribution

Independent Certification/ EU Construction Products Directive for Fire Products

Life Cycle Costs in Fire Detection Systems

To find out more email cpd@apollo-fire.com or visit www.apollo-fire.co.uk

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DISCOVERY®

Discovery and Discovery Marine are a range of high-specification, analogue addressable fire detectors offering reliable detection and false alarm management by a combination of EN54 approved operating modes and sophisticated algorithms. Discovery has a 'distributed intelligence system' where decisions are made in the detector head as well as at the control panel.

Discovery gives you total reassurance in installations where it is necessary to adapt detection to different operating environments and where protection against unwanted alarms is paramount.

DISCOVERY®

Key features:

• Five EN54 approved operating modes
• Automatic drift compensation to ensure constant sensitivity
• Advanced feature for audio visual devices
• Rejection of transient signals
• Flashing LED option
• Four bytes of non-volatile memory for user data
• Alarm flag for fast alarm reporting
• Conventional alarm facility during control panel processor fault
• 360° LED visibility in alarm
• Compatible with XP95 systems

marine & offshore

Key features:

• Approved use in the marine environment
• Five response modes for environmental adaptation
• Day/night switching for increased flexibility
• Drift compensation for false alarm reduction
• User programmability for data retention
• XPERT card addressing for increased security

Find Discovery products

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	Multisensor Detector	24
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	Open-Area Sounder Visual Indicator	87
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	Manual Call Point	107
	Marine Ionisation Smoke Detector	120

Find out more about the Discovery range at www.apollo-fire.co.uk/discovery

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5,500 Discovery products can be found in London Heathrow's Sofitel hotel.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

XP95 ®

The XP95 range of analogue addressable fire detectors is advanced in design, improved in performance and has unique features that benefit the installer and end user. The range features smoke detectors (optical and ionisation), standard and high temperature heat detectors and a multisensor. Beam detectors, flame detectors, manual call points, audio visual signalling devices, interface units and isolators complete the range. XP95 has a 'central intelligence' system where all the decisions are made by the control panel.

The XP95 range also offers Intrinsically Safe Detectors and XP95A for the UL, ULC and FM markets.

XP95 ®

Key features:

- Alarm flag for fast alarm reporting
- Alarm address for fast location of alarm
- XPERT card addressing
- Electronics-free base
- Easy installation
- Elegant design
- Insect resistant

XP95A

Key features:

- XPERT card addressing
- Analogue value report
- Alarm flags for fast alarm response
- Synchronisation of all loop-powered notification devices
- Advanced error check

Find XP95 products

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Find out more about the XP95 range at www.apollo-fire.co.uk/xp95

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orbis®

Orbis is a range of conventional detectors which have been developed with sophisticated technology previously only found in analogue addressable detectors.

Key features of Orbis include:

- Wide operating voltage of 8.5-33 VDC
- Wide operating and storage temperature -40°C to +70°C
- Electrically compatible with Series 60 and Series 65
- 360° visibility of LEDs
- Automatic drift compensation with DirtAlert® warning

- SensAlert® which uses a flashing LED to indicate that the detector is not operating correctly
- Algorithms for transient rejection
- Attractive and compact design
- Orbis Marine and Orbis IS detectors are also available

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0832

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Intrinsically Safe Heat Detector		148

Find out more about the Orbis range at www.apollo-fire.co.uk/orbis

series65® 9-33V

Series 65 incorporates well-proven sensing technologies together with advances in materials and electronics. Developed from the highly successful Series 60 range of detectors, Series 65 includes a chip (integrated circuit) based on that used in XP95 analogue addressable detectors.

Key features of Series 65 include:

- Wide operating voltage of 9-33 VDC
- Wide operating and storage temperature of -20°C to +60°C
- Can be used on security systems

- Electrically and mechanically compatible with Series 60
- Proven detection performance
- Series 65A range also available approved for the UL/ULC/FM

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0832

Find Series 65 products

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Find out more about the Series 65 range at www.apollo-fire.co.uk/series65

Apollo conventional detectors can be found in retail outlets around the globe, including the Morley City Shopping Centre in Perth, Australia.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Alarm Sense ®

Two-wire AlarmSense has been developed to make the design and installation of a fire detection and alarm system easier and more economic for small to medium sized buildings. The range also allows an existing system to be extended or modified if necessary. This flexibility makes AlarmSense an excellent choice for use in HMOs.

Key features of AlarmSense include:

- Patented RemovAlert™ head removal monitoring
- Local and general alarm switching
- Reduced wiring costs
- Quick and simple installation

- False alarm reduction with 'non-priority' signalling
- Flexible system design
- Detectors and call point alarms identifiable separately

Find AlarmSense products

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	Optical Smoke Detector	58
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Find out more about the AlarmSense range at www.apollo-fire.co.uk/alarmsense

CE 0333

XPANDER ®

XPander is a system in which individual detectors, call points, alarm devices and interfaces communicate with the XP95 loop by radio signals. An interface is connected to the loop in the same way as any other interface, such as an input/output unit.

Key features of XPander include:

- Easy to install
- XPERT card addressing
- Self-monitoring
- Proven technology
- No special control panel needed

- 868MHz radio signalling
- Up to 31 devices per interface
- Up to 5 interfaces per loop

Find XPander products

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Find out more about the XPander range at www.apollo-fire.co.uk/xpander

LPCB CE 0359 (Part 25)

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Analogue Addressable

Apollo offers two ranges of analogue addressable systems – Discovery and XP95. Discovery is Apollo's high-specification range and offers the following advantages over XP95:

- Five operating modes, each EN54 approved to provide the widest possible fire detection solution

- Automatic drift compensation where the detector automatically compensates for the build up of contamination, maintaining a stable alarm threshold

- Access to a more advanced range of features in Discovery audio visual equipment

Apollo devices can be found in The Savoy Hotel and Royal London Hospital (London), Grand Hotel Reykjavik (Iceland), and Mater Dei Hospital (Malta).

DISCOVERY®   **XP**95®

There are two types of analogue addressable system – those with 'distributed intelligence' and those with 'centralised intelligence'.

In systems with 'distributed intelligence', the detectors incorporate processors which can determine whether alarm levels of smoke or heat exist and can initiate action accordingly.

Detectors in systems with 'centralised intelligence' monitor the air around them for smoke or heat and transmit the data to the control panel on interrogation. The processor in the panel compares the values with stored values and determines whether a pre-alarm or alarm should be signalled.

The advantages of 'distributed intelligence' are local adaptation to the environment and reduction of traffic on the supply and data wires.

Apollo has always used an open, digital protocol since 1986 and has ensured backward compatibility when developing new products. An open protocol allows freedom of choice for the fire system specifier, installer and end user. A system using a digital protocol has a high immunity from corruption and is therefore often preferred in a system which is life critical.

Choice of detector type
The choice of detector from the analogue addressable range follows the well established principles of system design. That is, the optimum detector type will depend on the type of fire risk and fire load, and the type of environment in which the detector is sited.

For general use, smoke detectors are recommended since these give the highest level of protection. Smoke detectors from the analogue addressable range may be ionisation, optical or multisensor types. The most widely used single-sensor detector is the optical smoke detector. For the greatest versatility in designing fire detection systems the optical/heat multisensor is the detector of choice.

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DISCOVERY®

Discovery is a range of high specification, analogue addressable fire detectors. Discovery detectors offer reliable detection and false alarm management by a combination of EN54 approved operating modes and sophisticated algorithms. Discovery has a 'distributed intelligence' system where decisions are made in the detector head as well as the control panel. Drift compensation is also incorporated into the detector, allowing it to adapt to dirty or dusty environments which reduces false alarms.

Each detector in the Discovery range can operate in one of five response modes, which can be selected from the control panel or hand held programmer. The response characteristics have been carefully set so that the detectors comply with the requirements of the relevant part of EN54 in all response modes. Mode One will give a higher sensitivity to fire than Mode Five.

Designed for the use in medium to large applications with specific system requirements, Discovery gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms is paramount.

Key features of Discovery include:

- Five operating modes approved and certified to CPD and EN54
- Automatic drift compensation to ensure constant sensitivity
- Advanced features for audio visual devices
- Rejection of transient signals
- Flashing LED option
- Four bytes of non-volatile memory for user data
- Alarm flag for fast alarm reporting
- Conventional alarm facility during control panel processor fault
- 360° LED visibility in alarm
- Compatible with XP95 systems
- Insect resistant

LPCB   VdS   CE 0832

Find out more about the Discovery range at www.apollo-fire.co.uk/discovery

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Discovery Optical Smoke Detector

The Discovery Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

• Responds well to slow-burning, smouldering fires
• Well suited for bedrooms and escape routes
• Unaffected by wind or atmospheric pressure
• Five response modes
• Remote test feature

58000-600
Discovery Optical Smoke Detector

Discovery Multisensor Detector

The Discovery Multisensor Detector comprises optical smoke and thermistor temperature sensors which give both a combined signal as well as a separate heat signal for improved false alarm management.

• Ideal for a wide range of applications
• Enhanced false alarm management
• Recommended, in specific modes, for hotel bedrooms and hospital wards
• Unaffected by wind or atmospheric pressure
• Well suited for sensitive environments
• Five response modes
• Heat only and optical only options
• Remote test feature

58000-700
Discovery Multisensor Detector

Discovery Ionisation Smoke Detector

The Discovery Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

• Responds well to fast-burning, flaming fires
• Designed to operate in a variety of environments
• Resilient to dust
• Five response modes
• Remote test feature

58000-500
Discovery Ionisation Smoke Detector

Please check the Apollo website on a regular basis for up-to-date approvals information.

Discovery Carbon Monoxide Detector

Discovery CO/Heat Multisensor Detector

Discovery Heat Detector

The Discovery Carbon Monoxide Detector is good at detecting deep-seated fires. Please note that CO detectors do not detect smoke particles or heat and are not universal replacements for smoke detectors.

- Enhanced detection capability
- Ideal for smouldering fires
- Less susceptible to false alarms caused by steam than smoke detectors
- Five response modes
- Remote test feature

58000-300
Discovery Carbon Monoxide Detector

The Discovery CO/Heat Multisensor Detector is good at detecting deep-seated smouldering fires which give off a lot of CO as well as flaming fires. They are ideal for use in hotel bedrooms where steam may be present, dusty environments or even where simulated smoke may be present.

- Responds to smouldering and flaming fires
- Less susceptible to false alarms caused by steam and dust
- Five response modes
- Remote test feature

58000-305
Discovery CO/Heat Multisensor Detector

The Discovery Heat Detector uses a single thermistor to sense the air temperature around the detector.

- Ideal in environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading bays and car parks
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature

58000-400 Discovery Heat Detector

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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WORLD CLASS FIRE SOLUTIONS

Intelligent Mounting Base

Intelligent Deep Base

Isolating Base

All detectors in the Discovery range fit the Intelligent Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

- XPERT addressing
- One way fit of detector
- Locking feature to prevent unauthorised detector removal

45681-210 Intelligent Mounting Base

The Intelligent Deep Base is a mounting base for Discovery products which has an increased depth allowing for cables to be inserted from the side.

- Enables surface wiring
- XPERT addressing
- Locking feature to prevent unauthorised detector removal

45681-209 Intelligent Deep Base

The Isolating Base senses and detects short-circuit faults on Discovery loops and spurs.

- Up to 20 detectors or their equivalent load, may be installed between isolating bases
- High brightness LED
- Detects wiring short-circuits
- Minimises disruption from short-circuits

45681-284 Isolating Base

Please check the Apollo website on a regular basis for up-to-date approvals information.

Isolator

Isolator Base

Intelligent Low Power Relay Base

Intelligent Heater Base

The Isolator is placed at intervals on the loop and ensures that, in the case of a short-circuit, only the section between the isolators will be affected. When the short-circuit is removed, the isolators automatically restore power and data to the isolated section.

- Detects wiring short-circuits
- Minimises disruption from short-circuits
- Automatic de-isolation on short-circuit removal
- Up to 20 detectors or their equivalent load, may be installed between isolators

55000-720 Isolator

The Isolator Base is unique and designed to only accept the Isolator 55000-720.

45681-211 Isolator Base

The Intelligent Low Power Relay Base incorporates a low power relay to control field equipment.

- Provides a set of voltage-free contacts controlled by the remote output of a detector
- Draws negligible current
- Capable of switching up to 30V at 1A

45681-242
Intelligent Low Power Relay Base

The Intelligent Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

- Raises the ambient temperature of a detector chamber by approximately 10°C
- Limits the risks or potential for losses of functionality of detectors installed in cold conditions

45681-219
Intelligent Heater Base

45681-519
Waterproof Base Cover

45681-217
Deckhead Mounting Box

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WORLD CLASS FIRE SOLUTIONS

MiniDisc Remote Indicator

Blank XPERT Card

Pre-Addressed XPERT Cards

The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Small and discrete
- Anti-tamper screw to protect against unauthorised removal

53832-070 MiniDisc Remote Indicator

A universal address card supplied with all bases. Using a coding guide, pips are removed to set the address of the inserted detector.

- Simplifies and speeds up installation and commissioning
- Uses patented, proven technology
- Address remains the same, no matter how often detectors are replaced
- Flexibility to create any address

38531-771 Blank XPERT Card

Pre-Addressed XPERT Cards are supplied with pips already removed.

- Saves time and increases accuracy during commissioning
- Uses patented, proven technology
- Address remains the same, no matter how often detectors are replaced
- Complete set (1-126)

45682-127 Pre-Addressed XPERT Cards

! **Have you seen the latest technology solutions from Apollo, including OpenConnect? See page 11 for more information or visit www.open-connect.co.uk**

Please check the Apollo website on a regular basis for up-to-date approvals information.

Discovery Open-Area Sounder Visual Indicator

The Discovery Open-Area Sounder Visual Indicator uses Discovery Protocol and is designed for use in indoor and open areas. When a fire system is being commissioned a 'Magnetic Wand' can be used to adjust and test each sounder locally.

- 15 tone pairs
- Individual control of the sounder and visual indicator
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition to warning of fire, making the device ideal for use in schools etc.
- Soft start option, ideal for hospitals and nursing homes
- Group and global control for increased response time

Discovery Open-Area
Sounder Visual Indicator:
58000-005 Red lens
58000-007 White lens

29650-001 Magnetic Wand

Discovery Sounder Visual Indicator Base

The Discovery Sounder Visual Indicator Base uses the Discovery Protocol and is appropriate for use with all the Discovery detector heads. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

- Individual control of the sounder and visual indicator
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition warning of fire, ideal for schools
- Enables soft start option, ideal for hospitals and nursing homes
- Electronic bell tone
- 15 tone pairs

45681-393 Discovery Sounder Visual Indicator Base

29650-001 Magnetic Wand

Discovery Open-Area Voice Sounder and Sounder Visual Indicator

The Discovery Open-Area Voice Alarm Devices comprise a sounder and a sounder visual indicator that have been designed to provide clear instructional messages through the Discovery protocol. They are loop-powered wall mounted devices.

- Four pre-set message pairs, capable of up to 15 tone message pairs
- Low current and high volume
- Fully synchronised
- Set up and test at point of installation

Discovery Open-Area Voice Sounder:
58000-010 Red
58000-020 White

Discovery Open-Area Voice
Sounder Visual Indicator:
58000-030 Red
58000-040 White

Discovery smoke detectors and manual call points were installed in the US Air Force Base in Southern England, find out more about this case study on page 176.

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WORLD CLASS FIRE SOLUTIONS

Apollo Discovery Manual Call Point

Apollo's Discovery Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

- EN54-11 approved (EN54-17 approved for Isolator version)
- E-Z fit connectors
- Front facing addressing without the need to detach the backbox
- A unique, ergonomically designed key for resetting and front cover removal
- Backward compatibility and retro-fit
- Resettable element

58200-910
Apollo Discovery Manual Call Point

58200-908
Apollo Discovery Manual Call Point with Isolator

Apollo Waterproof Manual Call Point

Apollo's Waterproof Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

- IP67 rated
- EN54-11 approved (EN54-17 approved for Isolator version)
- A unique, ergonomically designed key for resetting and front cover removal
- Captive screws

58200-950
Apollo Waterproof Manual Call Point

58200-951
Apollo Waterproof Manual Call Point with Isolator

Discovery Manual Call Point (Non-Standard)

Apollo offers a selection of differently coloured call points suitable for a variety of applications such as initiating a "hazard" rather than a fire alarm. They can be used on XP95 and Discovery systems.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an activation in under 0.2 seconds
- Resettable element

Discovery Manual Call Point (non-standard):

58100-926 White (surface) †

58100-927 Yellow (surface) †

58100-928 Blue (surface) †

58100-929 Green (surface) †

58100-930 Orange (surface) †

† Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Interfaces

Apollo manufactures a comprehensive range of interfaces for systems which enable fire protection solutions to be engineered simply and effectively without the need for custom-designed equipment. These interfaces are available for use on a Discovery or XP95 system.

For more information on each interface see page 95

1 Standard Interfaces

Input/Output Unit

55000-847 Input/Output Unit

Three Channel Input/Output Unit

55000-588
Three Channel Input/Output Unit*

Output Unit

55000-849 Output Unit

Sounder Control Unit

55000-852 Sounder Control Unit

Switch Monitor

55000-843 Switch Monitor

Switch Monitor Plus

55000-841 Switch Monitor Plus

Zone Monitor

55000-845 Zone Monitor

Mains Switching Input/Output Unit

55000-875
Mains Switching Input/Output Unit

Locally Powered Zone Monitor

55000-864
Locally Powered Zone Monitor

2 DIN-Rail Interfaces

DIN-Rail Input/Output Unit

55000-803 DIN-Rail Input/Output Unit

DIN-Rail Output Unit

55000-804 DIN-Rail Output Unit

DIN-Rail Switch Monitor

55000-822 DIN-Rail Switch Monitor

DIN-Rail Mains Input/Output Unit

55000-797
DIN-Rail Mains Input/Output Unit

DIN-Rail Interface Enclosures

29600-239
DIN-Rail Interface Enclosure (4 units)
29600-240
DIN-Rail Interface Enclosure (10 units)

DIN-Rail Sounder Controller (5 Amperes)

55000-182
DIN-Rail Sounder Controller (5 Amperes)

DIN-Rail Switch Monitor Plus

55000-821
DIN-Rail Switch Monitor Plus

DIN-Rail Zone Monitor with Isolator

55000-812
DIN-Rail Zone Monitor with Isolator

DIN-Rail Dual Isolator

55000-802 DIN-Rail Dual Isolator

3 Mini Switch Monitor

55000-760 Mini Switch Monitor

* Standard Enclosure specific to 3 Channel Input/Output Unit.

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WORLD CLASS FIRE SOLUTIONS

XP95

The XP95 range of analogue addressable fire detectors combines proven design with performance and has unique features that benefit the installer and end user.

The range features smoke detectors (optical and ionisation), standard and high temperature heat detectors and a multisensor. Beam detectors, flame detectors, manual call points, audio visual signalling devices, interface units and isolators complete the range. XP95 has a 'central intelligence' system where all the decisions are made by the control panel.

Apollo has always used an open protocol since 1986 and has ensured backward compatibility when developing new products. An open protocol allows freedom of choice for the fire system specifier, installer and end user. A system using a digital protocol has a high immunity from corruption and is therefore often preferred in a large system where life is critical. XP95 is suitable for medium to large applications with simple installation requirements.

Key features of XP95 include:

- Alarm flag for fast alarm reporting
- Alarm address for fast location of alarm
- XPERT card addressing
- Electronics-free base
- Easy installation
- Elegant design
- Insect resistant

LPCB   VdS   CE
0832

Find out more about the XP95 range at www.apollo-fire.co.uk/xp95

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WORLD CLASS FIRE SOLUTIONS

XP95 Optical Smoke Detector

The XP95 Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure

55000-600
XP95 Optical Smoke Detector

55000-660
XP95 Optical Smoke Detector (black)

55000-620
XP95 Optical Smoke Detector (VdS)

XP95 Multisensor Detector

The XP95 Multisensor Detector contains an optical smoke sensor and a thermistor temperature sensor whose outputs are combined to give the final analogue value.

- Sensitive to a wide range of fires
- Well suited for environments such as hotel bedrooms
- Unaffected by wind or atmospheric pressure

55000-885
XP95 Multisensor Detector

XP95 Ionisation Smoke Detector

The XP95 Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Minimal effects from temperature, humidity, atmospheric pressure
- Well protected against electromagnetic interference over a wide frequency range

55000-500
XP95 Ionisation Smoke Detector

55000-560
XP95 Ionisation Smoke Detector (black)

55000-520
XP95 Ionisation Smoke Detector (VdS)

XP95 Heat Detector

The XP95 Heat Detector monitors temperature by using a single thermistor which provides a count output proportional to the external air temperature. The XP95 range features two heat detectors, standard and high temperature. The standard heat detector is classified as an A2S device and will report an alarm at 55°C. The high temperature detector, classified as a CS device, will report an alarm at 90°C.

- Ideal in environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading bays and carparks
- Unaffected by wind or atmospheric pressure

55000-400
XP95 Heat Detector A2S

55000-420
XP95 Heat Detector A2S (VdS)

55000-401
XP95 Heat Detector CS

Please check the Apollo website on a regular basis for up-to-date approvals information.

Intelligent Mounting Base

Isolating Base

Isolator Base

Isolator

All detectors in the XP95 range fit the Intelligent Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

- XPERT addressing
- One way fit of detector
- Locking feature to prevent unauthorised removal

45681-210
Intelligent Mounting Base

45681-361
Intelligent Mounting Base (black)

The new style Isolating Base senses and detects short-circuit faults on XP95 loops and spurs.

- Up to 20 detectors or their equivalent load, may be installed between isolating bases
- High brightness LED

45681-284 Isolating Base

The Isolator Base is unique and designed to only accept the Isolator 55000-720.

- Only accepts isolators

45681-211 Isolator Base

The Isolator is placed at intervals on the loop and ensures that, in the case of a short-circuit, only the section between the isolators will be affected. When the short-circuit is removed, the isolators automatically restore power and data to the isolated section.

- Detects wiring short-circuits using patented technology
- Minimises disruption from short-circuits
- Automatic de-isolation on short-circuit removal
- Up to 20 detectors or their equivalent load, may be installed between isolators

55000-720 Isolator (uses 45681-211 Isolator Base)

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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WORLD CLASS FIRE SOLUTIONS

Intelligent Low Power Relay Base

Intelligent Deep Base

Intelligent Heater Base

MiniDisc Remote Indicator

The intelligent Low Power Relay Base incorporates a low power relay to control field equipment.

- Provides a set of voltage-free contracts controlled by the remote output of a detector
- Draws negligible current
- Capable to switching up to 30V at 1A

45681-242 Intelligent Low Power Relay Base

The Intelligent Deep Base is a mounting base for XP95 products which has an increased depth allowing for cables to be inserted from the side.

- Enables surface wiring

45681-209
Intelligent Deep Base

The Intelligent Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

- Raises the ambient temperature of a detector chamber by approximately 10ºC
- Limits the risk for loss of functionality caused to detectors installed in cold conditions

45681-219
Intelligent Heater Base

45681-519
Waterproof Base Cover

45681-217
Deckhead Mounting Box

The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Anti-tamper screw to protect against unauthorised removal

53832-070
MiniDisc Remote Indicator

Please check the Apollo website on a regular basis for up-to-date approvals information.

Blank XPERT Card

Pre-Addressed XPERT Cards

Multi-Tone Open-Area Sounder

Intelligent Open-Area Sounder

A universal address card supplied with all bases. Using a coding guide, pips are removed to set the address of the inserted detector.

• Simplifies and speeds up installation and commissioning
• Uses patented, proven technology
• Address remains the same, no matter how often detectors are replaced
• Flexibility to create any address

38531-771
Blank XPERT Card

Pre-Addressed XPERT Cards are supplied with pips already removed.

• Saves time and increases accuracy during commissioning
• Uses patented, proven technology
• Address remains the same, no matter how often detectors are replaced
• Complete set (1-126)

45682-127
Pre-Addressed XPERT Cards 1-126

The Multi-Tone Open-Area Sounder is designed for use in open areas and can be connected to any Discovery or XP95 system.

• Updated to include choice of tones: Apollo, Slow Whoop and DIN
• Two volume settings 92dB(A) and 100dB(A)
• Synchronisation of tones
• Individual and group addressing
• Loop-powered
• Red or white options
• IP21C rated
• IP66 rated (weatherproof versions)

Multi-Tone Open-Area Sounder:

55000-278 Red

55000-279 White

Weatherproof Multi-Tone Open-Area Sounder:

55000-274 Red

55000-275 White

The Intelligent Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery or XP95 system.

• Self-test fault monitoring
• Choice of tones on standard device: Apollo, Slow Whoop and DIN
• Two volume settings 92dB(A) and 100dB(A)
• Synchronisation of tones
• Individual and group addressing
• Built-in isolator
• Red or white options
• Loop-powered
• IP65 rated

55000-001 Red Intelligent Open-Area Sounder

55000-002 White Intelligent Open-Area Sounder

Intelligent Open-Area Visual Indicator

Apollo XP95 Manual Call Point

Apollo Waterproof Manual Call Point

Manual Call Point (Non-Standard)

The Intelligent Open-Area Visual Indicator has been developed for use in situations where there is a risk that sounders will not be heard.

• For use with XP95 & Discovery systems
• Self-test fault monitoring
• IP65 rated
• Individual and group addressing
• Synchronisation of flashes
• Comes with Isolating Base as standard
• Loop-powered
• Red and clear lens options

> **55000-009** Intelligent Open-Area Visual Indicator (red lens)
>
> **55000-010** Intelligent Open-Area Visual Indicator (clear lens)

Apollo's XP95 Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. When activated, the manual call point interrupts the polling cycle for a fast response and has a combined LED indicator and front reset mechanism allowing for a quick and simple reset.

• EN54-11 approved (EN54-17 approved for Isolator version)
• E-Z fit connectors
• Front facing addressing without the need to detach the backbox
• A unique, ergonomically designed key for resetting and front cover removal
• Backward compatibility and retro-fit
• Resettable element

> **55200-905** Apollo XP95 Manual Call Point
>
> **55200-908** Apollo XP95 Manual Call Point with Isolator

Apollo's Waterproof Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

• IP67 rated
• EN54-11 approved (EN54-17 approved for Isolator version)
• A unique, ergonomically designed key for resetting and front cover removal
• Captive screws

> **58200-950** Apollo Waterproof Manual Call Point
>
> **58200-951** Apollo Waterproof Manual Call Point with Isolator

Apollo offers a selection of differently coloured call points suitable for a variety of applications such as initiating a "hazard" rather than a fire alarm. They can be used on XP95 and Discovery systems.

• 'Plug and Play' terminal connections for fast wiring
• Continuity link for wiring test before commissioning
• Reports an activation in under 0.2 seconds
• Resettable element

> Manual Call Point (non-standard):
>
> **58100-926** White (surface) †
>
> **58100-927** Yellow (surface) †
>
> **58100-928** Blue (surface) †
>
> **58100-929** Green (surface) †
>
> **58100-930** Orange (surface) †

† Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

Please check the Apollo website on a regular basis for up-to-date approvals information.

ANALOGUE
ADDRESSABLE

Interfaces

Apollo manufactures a comprehensive range of interfaces for systems which enable fire protection solutions to be engineered simply and effectively without the need for custom-designed equipment. These interfaces are available for use on a Discovery or XP95 system.

1 Standard Interfaces

Input/Output Unit

55000-847 Input/Output Unit

Three Channel Input/Output Unit

55000-588
Three Channel Input/Output Unit*

Output Unit

55000-849 Output Unit

Sounder Control Unit

55000-852 Sounder Control Unit

Switch Monitor

55000-843 Switch Monitor

Switch Monitor Plus

55000-841 Switch Monitor Plus

Zone Monitor

55000-845 Zone Monitor

Mains Switching Input/Output Unit

55000-875
Mains Switching Input/Output Unit

Locally Powered Zone Monitor

55000-864
Locally Powered Zone Monitor

2 DIN-Rail Interfaces

DIN-Rail Input/Output Unit

55000-803 DIN-Rail Input/Output Unit

DIN-Rail Output Unit

55000-804 DIN-Rail Output Unit

DIN-Rail Switch Monitor

55000-822 DIN-Rail Switch Monitor

DIN-Rail Mains Input/Output Unit

55000-797
DIN-Rail Mains Input/Output Unit

DIN-Rail Interface Enclosures

29600-239
DIN-Rail Interface Enclosure (4 units)
29600-240
DIN-Rail Interface Enclosure (10 units)

DIN-Rail Sounder Controller (5 Amperes)

55000-182
DIN-Rail Sounder Controller (5 Amperes)

DIN-Rail Switch Monitor Plus

55000-821
DIN-Rail Switch Monitor Plus

DIN-Rail Zone Monitor with Isolator

55000-812
DIN-Rail Zone Monitor with Isolator

DIN-Rail Dual Isolator

55000-802 DIN-Rail Dual Isolator

3 Mini Switch Monitor

55000-760 Mini Switch Monitor

* Standard enclosure specific to 3 Channel Input/Output Unit.

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WORLD CLASS FIRE SOLUTIONS

Conventional

In conventional systems detectors are wired as a circuit or zone. They signal fire conditions to a control panel by changing from a high to low impedance. The panel detects this impedance change by current monitoring and identifies the zone.

Apollo Conventional detectors can be found in The Adelphi Hotel (UK),
City Hospital (Slovenia) and City Lodges Hotels (South Africa).

orbis®   series65® 9-33V

Orbis and Series 65 Conventional detectors are recommended for a number of applications including:

• Cleanroom and EDP suites
• Hotel rooms, studio apartments and small flats
• Offices, long corridors, hospital wards and light industrial factories
• Warehouses and bars
• Loading bays and car parks
• Kitchens and laundry rooms
• Boiler rooms

Hotel rooms

For hotel rooms, studio apartments and small flats (up to 50 sq m) multisensor Orbis detectors and Series 65 optical detectors are recommended.

Car parks

Orbis multisensor detectors and Series 65 heat A1R and BR detectors are recommended for car parks (enclosed and ventilated) and loading bays.

Kitchens

A range of Orbis detectors including heat A1S, A2S, BS and CS as well as Series 65 CS detectors are recommended for kitchens and laundry rooms.

orbis®

Orbis is a modern and stylish conventional range developed with sophisticated technology previously only found in analogue addressable detectors. Orbis has been designed to make installation, commissioning and maintenance fast and simple.

Orbis comprises of optical smoke and multisensor detectors, seven grades of heat detector and a range of bases. Each type of detector is available in two versions:
• Standard
• Flashing LED

Key features of Orbis include:

• Wide operating voltage of 8.5-33 VDC

• Tolerates extreme operating conditions: -40°C to +70°C

• Electrically compatible with Series 60 and Series 65

• 360° visibility of LEDs

• Attractive and compact design

• Patented FasTest® reduces functional test to four seconds

• StartUp™ LED indicator for fast commissioning

• Calibrated sensitivity with automatic drift compensation and DirtAlert® warning

• SensAlert® LED to indicate faulty detectors

• Transient rejection algorithms reduce false alarms

• TimeSaver® Base

LPCB   VdS   C€
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Find out more about the Orbis range at www.apollo-fire.co.uk/orbis

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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WORLD CLASS FIRE SOLUTIONS

Orbis
Optical Smoke
Detector

The Orbis Optical Smoke Detector operates on the well established light scatter principle. The sensing technology used is radically different from previous optical detectors and significantly reduces false alarms.

- Responds well to slow-burning, smouldering fires
- Good performance in both black and white smoke
- Transient rejection algorithms reduce false alarms
- Automatic drift compensation with DirtAlert, a yellow flashing LED, to easily identify dirty detectors
- Red flashing LED at StartUp confirms the device is operating. SensAlert, yellow flashing LED, indicates faulty operation
- FasTest takes just four seconds to test and confirm detectors are functioning correctly
- DustDefy system prevents dust ingress while maintaining airflow

ORB-OP-12001-APO
Orbis Optical Smoke Detector

ORB-OP-12003-APO
Orbis Optical Smoke Detector with flashing LED

Orbis
Multisensor
Detector

The Orbis Multisensor Detector benefits from the same false alarm reduction technology as the optical detector, enhanced by the addition of a thermal sensing element.

- Responds well to fast-burning, flaming fires
- Transient rejection algorithms reduce false alarms
- Automatic drift compensation with DirtAlert, a yellow flashing LED, to easily identify dirty detectors
- Red flashing LED at StartUp confirms the device is operating. SensAlert, yellow flashing LED, indicates faulty operation
- FasTest takes just four seconds to test and confirm detectors are functioning correctly
- DustDefy system prevents dust ingress while maintaining airflow

ORB-OH-13001-APO
Orbis Multisensor Detector

ORB-OH-13003-APO
Orbis Multisensor Detector with flashing LED

Orbis
Heat
Detector

The Orbis Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

- Can be used for applications where smoke detectors are unsuitable
- Ideal in environments that are dirty or smoky under normal conditions
- Red flashing LED at StartUp confirms the device is operating. SensAlert, yellow flashing LED, indicates faulty operation
- FasTest takes just four seconds to test and confirm detectors are functioning correctly

Standard:
ORB-HT-11001-APO A1R
ORB-HT-11166-APO A1S
ORB-HT-11002-APO A2S
ORB-HT-11003-APO BR
ORB-HT-11004-APO BS
ORB-HT-11005-APO CR
ORB-HT-11006-APO CS

With flashing LED:
ORB-HT-11013-APO A1R
ORB-HT-11167-APO A1S
ORB-HT-11014-APO A2S
ORB-HT-11015-APO BR
ORB-HT-11016-APO BS
ORB-HT-11017-APO CR
ORB-HT-11018-APO CS

Please check the Apollo website on a regular basis for up-to-date approvals information.

Orbis
LX Base

TimeSaver®
Base

TimeSaver®
Diode Base

The Orbis LX Base has two slots for fixing screws at a spacing of 51mm to 69mm. Detectors fit into the base one way only and require clockwise rotation without force to be plugged in.

- One way fit
- Detector locking mechanism

| ORB-MB-00012-APO Orbis LX Base |

The TimeSaver Base is a design that provides installers with an open working area with fixing holes shaped to allow a fast mounting procedure.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Cable stripping guide
- Detector locking mechanism

ORB-MB-00001-APO
TimeSaver Base with continuity switch

ORB-MB-00002-APO
TimeSaver Base LX
without continuity switch

The TimeSaver Diode Base has the same design as the standard TimeSaver Base with the addition of a diode. It is used in systems which use active EOL monitoring for head removal.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Cable stripping guide
- Detector locking mechanism
- Continuity link for voltage testing of zone wiring prior to commissioning
- Other devices continue to work during unauthorised removal of detectors

ORB-DB-00003-APO
TimeSaver Diode Base

For our range of Orbis Marine products see page 126.

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WORLD CLASS FIRE SOLUTIONS

TimeSaver®
Relay Base

Sav-Wire
Base

TimeSaver
Deep Base

The TimeSaver Relay Base incorporates a single-pole voltage-free changeover contact for switching external equipment. When the detector changes to the alarm state, the relay is energised, causing the contact to change state. The contact will remain in this condition until the detector is reset.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Cable stripping guide
- Detector locking mechanism
- Continuity link for voltage testing of zone wiring prior to commissioning
- Capable of switching up to 30V at 1A

ORB-RB-10004-APO
TimeSaver Relay Base

The Sav-Wire Base is designed to allow Orbis detectors to be used in Sav-Wire detection and alarm systems.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Cable stripping guide
- Detector locking mechanism
- Is used in Sav-Wire systems

ORB-SW-10005-APO
Sav-Wire Base

The TimeSaver Deep Base is a mounting base for Orbis products which has an increased depth which allows for cables to be inserted into the side of the product.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Cable stripping guide
- Detector locking mechanism
- Enables surface wiring

ORB-MB-00019-APO
TimeSaver Deep Base

Please check the Apollo website on a regular basis for up-to-date approvals information.

Orbis Heater Base

The Orbis Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

- Raises the ambient temperature of a detector chamber by approximately 10°C
- Limits the risk or potential for loss of functionality to detectors installed in cold conditions

ORB-HB-00020-APO
Orbis Heater Base

45681-519
Waterproof Base Cover

45681-217
Deckhead Mounting Box

MiniDisc Remote Indicator

The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Small and discrete
- Anti-tamper screw to protect against unauthorised removal

53832-070
MiniDisc Remote Indicator

Conventional Manual Call Point

Apollo's Conventional Manual Call Points comply with EN54-11 and are available in both indoor and outdoor variants. Apollo also offers a yellow variant suitable for alternative applications.

- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-001
Conventional Manual Call Point without LED

55100-002
Conventional Manual Call Point without LED yellow (non-standard)*

55100-003
Conventional Waterproof Manual Call Point without LED

55100-004
Conventional Waterproof Manual Call Point without LED yellow (non-standard)*

* Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

apollo WORLD CLASS FIRE SOLUTIONS

series65 ®

9-33V

Series 65 incorporates well-proven sensing technologies together with advances in materials and electronics. Developed from the highly successful Series 60 range of detectors, Series 65 includes a chip (integrated circuit) based on that used in XP95 analogue addressable detectors.

Having a wide operating voltage of 9-33V, the Series 65 detectors can be integrated into security systems, when used with a relay base. The range consists of ionisation, integrating ionisation and optical smoke detectors, four grades of heat detector and a range of bases. Each type of detector is available in three versions:
• Standard
• Flashing LED
• Flashing LED and magnet operated test switch

Key features of Series 65 include:

• Wide operating voltage of 9–33 VDC

• Wide operating and storage temperature of -20°C to +60°C

• Can be used on security systems

• Electrically and mechanically compatible with Series 60

• Proven detection performance

LPCB   VdS   CE
0832

Find out more about the Series 65 range at www.apollo-fire.co.uk/series65

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Series 65 Optical Smoke Detector

The Series 65 Optical Smoke Detector incorporates a pulsing LED located within the housing of the detector. The external detector moulding is identical to that of the ionisation detector but has an indicator LED which is clear in quiescent state but produces a red light in alarm.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Flashing LED and magnet operated test switch option

55000-317
Series 65 Optical Smoke Detector

55000-316
Series 65 Optical Smoke Detector with flashing LED

55000-315
Series 65 Optical Smoke Detector with flashing LED and magnetic test switch

55000-308FRA
Series 65 Optical Smoke Detector (French market)*

Series 65 Ionisation Smoke Detector

The Series 65 Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast burning, flaming fires
- Designed to operate in a variety of environments
- Flashing LED and magnet operated test switch option

55000-217
Series 65 Ionisation Smoke Detector

55000-216
Series 65 Ionisation Smoke Detector with flashing LED

55000-215
Series 65 Ionisation Smoke Detector with flashing LED and magnetic test switch

Series 65 Integrating Ionisation Smoke Detector

Ionisation detectors use a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm. Circuitry in the Integrating Ionisation Smoke Detector protects against transient levels of smoke above the normal threshold for up to 20 seconds.

- Responds well to fast burning, flaming fires
- Designed to operate in environments where transient levels of smoke may be expected
- Wide operating voltage
- Flashing LED and magnet operated test switch option

55000-220
Series 65 Integrating Ionisation Smoke Detector

55000-219
Series 65 Integrating Ionisation Smoke Detector with flashing LED

55000-218
Series 65 Integrating Ionisation Smoke Detector with flashing LED and magnetic test switch

* Does not have CPD or VdS approval.

Please check the Apollo website on a regular basis for up-to-date approvals information.

Series 65
Heat
Detector

Series 65
Standard
Base

Series 65
Diode
Base

The Series 65 Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are 12 heat detectors in the Series 65 range designed to suit a wide variety of operating conditions.

- Can be used for applications where smoke detectors are unsuitable
- Ideal environments that are dirty or smoky under normal conditions
- Wide operating voltage
- Flashing LED and magnet operated test switch option

The Series 65 Standard Base has been designed to enable detectors to be fitted without the need of force – particularly useful when fitting to suspended ceilings. All Series 65 bases have a one way only fit. Detectors can be locked into place by a grub screw using a 1.5mm hexagonal screwdriver.

- Detector locking mechanism
- One way fit
- Easy to wire
- Contains an earth connector
- Contains no electrical parts
- Terminal for remote indicator

The Series 65 Diode Base is designed for use with conventional systems that have manual call points and detector bases on the same circuit. The base is fitted with a schottky diode on the 'L1 IN' and 'L1 OUT' wiring terminals. This base can only be used with compatible control equipment.

- Detector locking mechanism
- One way fit
- Easy to wire
- Contains an earth connector
- Continues to work during unauthorised removal of detectors

45681-201 Series 65 Diode Base

55000-122 A1R standard

55000-121 A1R with flashing LED

55000-120 A1R with flashing LED and magnetic test

55000-127 BR standard

55000-126 BR with flashing LED

55000-125 BR with flashing LED and magnetic test

55000-132 CR standard

55000-131 CR with flashing LED

55000-130 CR with flashing LED and magnetic test

55000-137 CS standard

55000-136 CS with flashing LED

55000-135 CS with flashing LED and magnetic test

45681-200 Series 65 Standard Base
29600-095
1.5mm Hexagonal Screwdriver

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WORLD CLASS FIRE SOLUTIONS

Series 65
Sav-Wire
Base

The Series 65 Sav-Wire Base is designed to allow Series 65 detectors to be used in Sav-Wire detection and alarm systems.

• Detector locking mechanism
• One way fit
• Easy to wire
• Contains an earth connector

45681-206
Series 65 Sav-Wire Base

Series 65
Standard
Relay Base

The Series 65 Standard Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

• Detector locking mechanism
• One way fit
• Easy to wire
• Contains an earth connector

45681-245
Series 65 Standard Relay Base

Series 65
Auxiliary
Relay Base

The Series 65 Auxiliary Relay Base provides two sets of volt-free changeover contacts to facilitate the switching of a remote LED or other auxiliary device.

• Detector locking mechanism
• One way fit
• Easy to wire
• Contains an earth connector

45681-246
Series 65 Auxiliary Relay Base

Series 65
End-of-Line
Relay Base

The Series 65 End-of-Line (EOL) Relay Base is intended for use with four-wire circuits and features two sets of changeover contacts and a power supervision relay.

• Detector locking mechanism
• One way fit
• Easy to wire
• Contains an earth connector

45681-247
Series 65 End-of-Line Relay Base (12V)

45681-248
Series 65 End-of-Line Relay Base (24V)

Please check the Apollo website on a regular basis for up-to-date approvals information.

Series 65 12V Relay Base

MiniDisc Remote Indicator

Series 65 Sounder Base

Conventional Manual Call Point

The Series 65 12V Relay Base is designed for use in both fire and security systems. For fire systems a jumper on the PCB is fitted to a 'latching' position. For security systems the jumper is moved to another position so that the base is 'non-latching'.

- Detector locking mechanism
- One way fit
- Easy to wire
- Contains an earth connector
- Can be used in fire and security systems

45681-508
Series 65 12V Relay Base

The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Small and discrete
- Anti-tamper screw to protect against unauthorised removal

53832-070
MiniDisc Remote Indicator

The Series 65 Sounder Base is a high-efficiency conventional alarm sounder incorporating a base for the Series 65 range of detectors. The sounder base can be secured to a conduit box or surface mounted.

- 32 tones as standard
- Provides detection and alarm signal at one point
- Diode option available

45681-512
Series 65 Sounder Base

45681-513
Series 65 Sounder Base with diode

The Conventional Manual Call Point is compliant with EN54-11 and is available in both indoor and outdoor variants. Apollo also offers different coloured call points, suitable for alternative applications.

- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-001
Conventional Manual Call Point without LED

55100-002
Conventional Manual Call Point without LED yellow (non-standard)*

55100-003
Conventional Waterproof Manual Call Point without LED

55100-004
Conventional Waterproof Call Point without LED yellow (non-standard)*

> **!** **For our full range of Manual Call Points see page 104.**

* Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

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WORLD CLASS FIRE SOLUTIONS

Two-Wire Technology

In two-wire conventional systems, fire detection and alarm products are connected to the same pair of supply wires, making installation quicker, less expensive and more flexible than traditional four-wire conventional systems. Two-wire systems are particularly well suited for small to medium sized buildings.

Apollo's Two-Wire detection and alarm products offer flexible system designs and a reduction in wiring and installation costs.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

AlarmSense®

Two-Wire AlarmSense® has been developed to make the design and installation of a fire detection and alarm system easier and more economic for small to medium sized buildings. The range also allows an existing system to be extended or modified if necessary. This flexibility makes AlarmSense an excellent choice for use in Houses in Multiple Occupation (HMO's).

B&Bs and hotels

The entire AlarmSense range has been designed to enable compliance with BS5839-1 and BS5839-6 in addition to EN54 standards. AlarmSense is also compliant with the Construction Products Directive (CPD).

Flats and bedsits

Reduced wiring costs, quick and simple installation and false alarm reduction with 'non-priority' signalling make AlarmSense perfectly suited to small residential projects.

Halls of residence

The Two-Wire AlarmSense range incorporates a number of technologically advanced features such as the patented RemovAlert™ which alerts the control panel if a detector has been removed without authorisation.

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*Alarm**S**ense*®

Two-Wire AlarmSense® has been developed to make the design and installation of a fire detection and alarm system easier and more economic for small to medium sized buildings. The range also allows an existing system to be extended or modified if necessary. This flexibility makes AlarmSense an excellent choice for use in Houses in Multiple Occupation (HMO's).

The Two-Wire AlarmSense range incorporates a number of technologically advanced features such as patented RemovAlert™ which alerts the control panel if a detector has been removed without authorisation.

The entire AlarmSense range has been designed to enable compliance with BS5839-1 and BS5839-6 in addition to EN54 standards. AlarmSense is also compliant with the Construction Products Directive (CPD).

Key features of AlarmSense include:

- Patented RemovAlert™ head removal monitoring
- Local and general alarm switching
- Reduced wiring costs
- Quick and simple installation
- False alarm reduction with 'non-priority' signalling
- Flexible system design
- Detectors and call point alarms identifiable separately

CE
0333

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WORLD CLASS FIRE SOLUTIONS

AlarmSense Optical Smoke Detector

The AlarmSense Optical Smoke Detector works using the light scatter principle. The detector changes to alarm state at a pre-set threshold of smoke penetration into the sensing chamber.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- 360° visibility of LEDs
- Reduces false alarms
- Quick and simple installation

55000-390
AlarmSense Optical Smoke Detector

AlarmSense Integrating Optical Smoke Detector

The AlarmSense Integrating Optical Smoke Detector works using the light scatter principle. The detector also has the ability to monitor and discard transient sources of smoke.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- 360° visibility of LEDs
- Quick and simple installation
- Designed to operate in environments where transient levels of smoke may be expected
- Reduces false alarms
- 20 second delay

55000-391
AlarmSense Integrating Optical Smoke Detector

AlarmSense Heat Detector

There are two heat detectors in the AlarmSense range designed to suit a wide variety of operating conditions. A static heat detector (CS) which responds only when a fixed temperature has been reached and a rate-of-rise detector (A1R) which has a fixed upper limit, but in addition, measures the rate of increase in temperature.

- Can be used for applications where smoke detectors are unsuitable
- Ideal environments that are dirty or smoky under normal conditions
- CS detectors are ideal for use in environments with rapid temperature fluctuations such as boiler rooms
- Reduction of false alarms
- 360° visibility of LEDs
- Quick and simple installation

55000-190
AlarmSense Heat Detector A1R

55000-193
AlarmSense Heat Detector CS

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

AlarmSense
Base

AlarmSense detectors can only be mounted into the AlarmSense Base. The base is used for installing detectors that do not require an integral sounder or sounder visual indicator.

- Detects the removal of a detector head and reports a fault
- Continues to work during unauthorised removal of detectors
- Quick and simple installation

45681-244 AlarmSense Base

AlarmSense
Alarm
Relay

The AlarmSense Alarm Relay enables devices such as Visual Indicator, pillow/bed alarms and radio vibrating or paging devices to be connected to the fire detection system. This allows the system to comply with the requirements of the DDA.

- Ensures DDA compliance

55000-835 AlarmSense Alarm Relay

MiniDisc
Remote
Indicator

The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Small and discrete
- Anti-tamper screw to protect against unauthorised removal

53832-070 MiniDisc Remote Indicator

! **For technical information about AlarmSense view the product guide within the literature section at www.apollo-fire.co.uk/alarmsense**

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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AlarmSense Open-Area Sounder

The AlarmSense Open-Area Sounder is designed for use in open areas.

- Apollo tone – synchronised with AlarmSense sounders and sounder visual indicator bases
- Polarity insensitive
- IP65 rated

55000-018
AlarmSense Open-Area Sounder

AlarmSense Open-Area Visual Indicator

The AlarmSense Open-Area Visual Indicator is designed for use in situations where there is a risk that sounders will not be heard.

- Synchronised flashing LEDs
- Polarity insensitive
- IP65 rated

55000-035
AlarmSense Open-Area Visual Indicator

AlarmSense Open-Area Sounder Visual Indicator

The AlarmSense Open-Area Sounder Visual Indicator is designed for use in open areas.

- Apollo tone – synchronised with AlarmSense sounders and sounder visual indicator bases
- Synchronised flashing red LED on sounder visual indicators and visual indicators
- Polarity insensitive
- IP65 rated

55000-017
AlarmSense Open-Area Sounder Visual Indicator

AlarmSense packages

Sounder Base combinations

AlarmSense Optical Smoke Detector with Sounder Base	55000-392
AlarmSense Integrating Optical Smoke Detector with Sounder Base	55000-393
AlarmSense A1R Heat Detector with Sounder Base	55000-196
AlarmSense CS Heat Detector with Sounder Base	55000-197

Sounder Visual Indicator Base combinations

AlarmSense Optical Smoke Detector with Sounder Visual Indicator Base	55000-394
AlarmSense Integrating Optical Smoke Detector with Sounder Visual Indicator Base	55000-395
AlarmSense A1R Heat Detector with Sounder Visual Indicator Base	55000-198
AlarmSense CS Heat Detector with Sounder Visual Indicator Base	55000-199

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

AlarmSense Sounder Base

AlarmSense Sounder Visual Indicator Base

AlarmSense Manual Call Point

The AlarmSense Sounder Base can only be used with AlarmSense systems. It is fitted with electronic circuitry to monitor the presence of detectors and signals any unauthorised removal of detector heads. It is supplied with a high or low volume setting and red or white caps are available for stand-alone installation.

- AlarmSense priority/non priority signal recognition
- Detects the removal of a detector head and reports a fault
- Continues to work during unauthorised removal of detectors
- Quick and simple installation
- Provides audible signal and detection at one point
- High and low volume ranges

45681-510 AlarmSense Sounder Base

45681-295 Red cap

45681-294 White cap

The AlarmSense Sounder Visual Indicator Base is designed to be used with AlarmSense systems only. It is supplied with a high and low volume setting and red or white caps are available for stand-alone installation.

- Sounder range between 70dB(A) and 87dB(A)
- Detects the removal of a detector head and reports a fault
- Continues to work during unauthorised removal of detectors
- Quick and simple installation

45681-509
AlarmSense Sounder Visual Indicator Base

45681-295 Red cap

45681-294 White cap

The AlarmSense Manual Call Point is compliant with EN54:11. It is different from other conventional call points in that it can be detected as an operated call point rather than a detector that has changed to the alarm state.

- Resettable element
- Red LED to signal alarm

55100-894
AlarmSense Manual Call Point (surface)

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Wireless Technology

Traditionally, fire detection systems in industrial and commercial applications have used hard wired installations. These systems are generally installed at the time of construction or refurbishment, making the laying of cables less of an issue. Certain applications do not lend themselves to this approach, such as occupied buildings, heritage sites, palaces, annexes etc. – this is where wireless systems provide the ideal solution.

Apollo devices can be found in The Royal Albert Hall (London), Marianske Lazne Theatre (Czech Republic) and Guildhall (Portsmouth).

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

XPANDER®

It is sometimes very difficult to introduce cable runs into buildings which were not designed for the modern age. It may also be that a collection of buildings such as an open air museum, requires fire protection but is not suitable for normal wired systems. It is for buildings of this kind that XPander has been developed.

Architecturally sensitive

XPander can be incorporated into fire detection systems in buildings where the use of cables is either impractical or undesirable such as palaces, stately homes and listed buildings.

Annexes

A collection of buildings may also require fire protection but are not suitable for normal wired systems.

Temporary structures

XPander may also be used in sites with discrete buildings which need to be connected to a central control panel but where wiring might present problems.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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WORLD CLASS FIRE SOLUTIONS

XPANDER®

XPander is a range of wireless products in which individual detectors, call points, alarm devices and interfaces communicate through a Loop Interface with an Apollo addressable system, using radio signals.

Radio communication of the XPander range of products is bi-directional and it is certified to the radio standard, EN 54-25. The XPander Loop Interface Unit is connected to the loop in the same way as any other device, such as an input/output unit.

Every XPander product is assigned an address which is recognised by the control panel in the same way as any hard wired device. The XPander range benefits from the patented XPERT technology that is also used in Discovery and XP95.

XPander can be incorporated into fire detection systems where the use of fire cables is either impractical or undesirable including stately homes and architecturally sensitive buildings.

Key features of XPander include:

- Easy to install
- XPERT card addressing
- Self-monitoring
- Proven technology
- No special control panel needed
- 868MHz radio signalling
- Up to 31 devices per interface
- Up to 5 interfaces per loop
- All detectors within the XPander range are sold with mounting bases

CE 0359 (Part 25)

LPCB
FIRE PREVENTION CERTIFICATION BOARD

Find out more about the XPander range at www.apollo-fire.co.uk/xpander

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WORLD CLASS FIRE SOLUTIONS

XPander
Optical Smoke Detector and Mounting

The XPander Optical Smoke Detector works on the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

• Wireless
• Performs well in black and white smoke
• Bi-directional radio communications
• XPERT card addressing system
• Five year battery life using standard AA alkaline batteries

XPA-CB-12034-APO
XPander Optical Smoke Detector and Mounting Base

XPander
Multisensor Detector and Mounting Base

The XPander Multisensor Detector contains an optical smoke sensor and a thermistor temperature sensor from which outputs are combined to give the final analogue value.

• Wireless
• Multisensor technology reduces false alarms
• Increased sensitivity to flaming fires
• XPERT card addressing system
• Five year battery life using standard AA alkaline batteries

XPA-CB-13032-APO
XPander Multisensor Detector and Mounting Base

XPander
Heat Detector and Mounting Base

There are two heat detectors in the XPander range designed to suit a wide variety of operating conditions. A Static Heat Detector (CS) which responds only when a fixed temperature has been reached and a Rate-of-Rise Detector (A1R) which has a fixed upper limit, but in addition, measures the rate of increase in temperature.

• Wireless
• Can be used in applications where smoke detectors are unsuitable
• Ideal for environments that are dirty or smoky under normal conditions
• CS detectors are ideal for use in environments with rapid temperature fluctuations such as boiler rooms
• Bi-directional (monitored) radio platform
• Five year battery life using standard AA alkaline batteries

XPA-CB-11170-APO
Rate-of-Rise (A1R) 57°C

XPA-CB-11171-APO
Static (CS) 90°C

Please check the Apollo website on a regular basis for up-to-date approvals information.

XPander Input/Output Unit

The XPander Input/Output Unit is a radio based interface and offers two monitored input circuits and two relay outputs. It can be used for controlling fire doors, fire dampers, smoke vents and other fire engineering applications.

• Wireless
• Monitored switch circuit
• Voltage-free contacts
• Capable of switching up to 30V at 1A
• Five year battery life using standard AA alkaline batteries

XPA-IN-14011-APO
XPander Input/Output Single Unit

XPA-IN-14012-APO
XPander Input/Output Dual Unit

XPander Loop Interface Unit

The XPander Loop Interface Unit can monitor up to 31 XPander devices and report each device's status to an intelligent control panel.

• Connects up to 31 XPander devices to an XP95 or Discovery loop
• Translates radio signals from XPander detectors to the control panel
• Built-in loop isolator
• Loop-powered

XPA-IN-14007-APO
XPander Loop Interface Unit

XPander Survey Tool

The XPander Survey Tool is used at the site survey stage to ascertain if a site is suitable for an XPander installation. A site survey must be carried out before XPander can be installed.

• Indicates the suitability of proposed device location

XPA-TE-14010-APO
XPander Survey Tool

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XPander XPERT Cards

XPander Sounder and Sounder Base

XPander Sounder Visual Indicator and Sounder Base

XPander Manual Call Point

Address card supplied with all bases. Using a coding guide, pips are removed to set the address of the inserted device.

• Simplifies and speeds up installation and commissioning
• Address remains the same, no matter how often detectors are replaced
• Uses patented, proven technology
• Flexibility to create any address

29600-413
XPander Blank XPERT Card (white)

29600-399
XPander Blank XPERT Card (red)

The XPander Sounder and Sounder Base is wireless and designed to be used with XPander detectors and manual call points.

• Wireless
• Bi-directional (monitored) radio platform
• Choice of 32 selectable tones
• Audible self-test available
• Output is between 92 and 106db(A) at 1m – dependent on tone setting

XPA-CB-14001-APO
XPander Sounder and Sounder Base (red)

XPA-CB-14002-APO
XPander Sounder and Sounder Base (white)

The XPander Sounder Visual Indicator and Sounder Base is wireless and designed to be used with XPander detectors and manual call points.

• Wireless
• Bi-directional (monitored) radio platform
• Choice of 32 selectable tones
• Audible self-test available
• Output is between 92dB(A) and 106dB(A) at 1m – dependent on tone setting

XPA-CB-14003-APO
XPander Sounder Visual Indicator (red) and Sounder Base (red)

XPA-CB-14004-APO
XPander Sounder Visual Indicator (amber) and Sounder Base (white)

XPA-CB-14005-APO
XPander Sounder Visual Indicator (clear) and Sounder Base (white)

The XPander Manual Call Point is compliant with EN54:11. It is wireless and is powered by two independent packs of three AA alkaline batteries with a typical five year life.

• Wireless
• XPERT addressing
• Resettable element
• Fast response reports an alarm in under one second
• LED to indicate operation

XPA-MC-14006-APO
XPander Manual Call Point

Please check the Apollo website on a regular basis for up-to-date approvals information.

XPander Omni-Directional Aerial

XPander Directional Aerial

XPander Weather Resistant Omni-Directional Aerial

XPander Weather Resistant Directional Aerial

The XPander Omni-Directional Aerial is used to strengthen the radio signals sent between the XPander Interface Unit and XPander devices.

XPA-AE-14008-APO
XPander Omni-Directional Aerial

The XPander Directional Aerial is used to pick up radio signals from outbuildings and annexes.

XPA-AE-14009-APO
XPander Directional Aerial

The XPander Weather Resistant Omni-Directional Aerial includes three metres of co-ax, surge protector and attenuator. For external use (IP68).

XPA-AE-14014-APO
XPander Weather Resistant Omni-Directional Aerial

The XPander Weather Resistant Directional Aerial includes three metres of co-ax, surge protector and attenuator. For external use (IP54).

XPA-AE-14015-APO
XPander Weather Resistant Directional Aerial

Apollo offer a series of one day training courses. See page 15 for more information.

XPander Combined Sounder and Detector

NEW

The XPander Combined Sounder and Detector is wireless and designed to provide one point notification and detection.

• Wireless
• Available with a choice of XPander detectors
• Bi-directional (monitored) radio platform
• A choice of 4 tone pairs
• Certified to EN54 Part 25

XPA-CB-14016-APO
XPander Combined Sounder and Optical Smoke Detector

XPA-CB-14017-APO
XPander Combined Sounder and Heat Detector (Class A1R)

XPA-CB-14018-APO
XPander Combined Sounder and Heat Detector (Class CS)

XPA-CB-14019-APO
XPander Combined Sounder and Multisensor Detector

XPander Combined Sounder Visual Indicator and Detector

NEW

The XPander Combined Sounder Visual Indicator and Detector is wireless and designed to provide a one point notification and detection.

• Wireless
• Available with a choice of XPander detectors
• Bi-directional (monitored) radio platform
• A choice of 4 tone pairs
• Certified to EN54 Part 25

XPA-CB-14020-APO
XPander Combined Sounder Visual Indicator (red) and Optical Smoke Detector

XPA-CB-14021-APO
XPander Combined Sounder Visual Indicator (red) and Heat Detector (Class A1R)

XPA-CB-14022-APO
XPander Combined Sounder Visual Indicator (red) and Heat Detector (Class CS)

XPA-CB-14023-APO
XPander Combined Sounder Visual Indicator (red) and Multisensor Detector

XPA-CB-14024-APO
XPander Combined Sounder Visual Indicator (clear) and Optical Smoke Detector

XPA-CB-14025-APO
XPander Combined Sounder Visual Indicator (clear) and Heat Detector (Class A1R)

XPA-CB-14026-APO
XPander Combined Sounder Visual Indicator (clear) and Heat Detector (Class CS)

XPA-CB-14027-APO
XPander Combined Sounder Visual Indicator (clear) and Multisensor Detector

Accessories:
XPA-WB-14036-APO
XPander Combined Sounder and Detector Base

XPA-WB-14037-APO
XPander Combined Sounder Visual Indicator (red) and Detector Base

XPA-WB-14038-APO
XPander Combined Sounder Visual Indicator (clear) and Detector Base

Please check the Apollo website on a regular basis for up-to-date approvals information.

Case Study

Howzat! Apollo and TVF deliver a sporting success at The Kia Oval

Summary	
Project Name:	Kia Oval
Location:	Surrey, UK
Market:	Commercial
Products used:	Products from the XPander and Discovery ranges
Installer:	TVF (UK) Ltd

Playing host to thousands of sports fans each year, Surrey County Cricket Club's ground, The Kia Oval, is now home to a state of the art Apollo fire detection system.

Over 150 years old the Kia Oval, which traditionally hosts the final test match of the English season and saw W.G. Grace score a century on his debut for England, is a 23,000 capacity ground. Following the re-development of the Vauxhall End, TVF (UK) Ltd undertook the design and installation of fire detection systems into The Pavilion, Lock and Laker Stands at the Pavilion End, which also houses the exclusive Kennington Club, committee rooms and museum. Apollo was the obvious choice for TVF when choosing an open protocol system that could protect one of the most distinctive stands in international Cricket.

The installation, engineered to suit the environment, consisted of a hybrid of Apollo's Discovery hard-wired and XPander radio ranges, working in conjunction with an advanced control panel in each stand. With 20 zones for each stand, over 200 optical detectors were installed along with 30 call points and in excess of 30 loop interfaces/XPander radio devices.

John Baker at TVF explains some of the challenges behind the installation: "The Pavilion End is an iconic part of the Kia Oval. It's traditional rooms are packed with history. As such, Apollo's wireless detector range, XPander, was the obvious choice allowing us to install with minimum disruption to both the members and the decor. There are also a number of more functional areas in the Club, such as the kitchen and plant rooms, where we were able to fit Discovery products."

The installation at the Pavilion End follows on from TVF's installation of Apollo Discovery call points and detectors in the Lock and Laker Stand eighteen months earlier. This experience has put TVF in a good position to understand the unique demands of this environment.

John continues: "Any venue hosting a variety of large-scale events needs a robust and accurate fire detection system. As such, we have installed a system with double-knock detectors (alarms are only sounded if two detectors are activated helping to minimise false alarms) and one that links to other gates in the ground. In addition, there are lamp buzzers in key areas allowing for operational match day crowd management to ensure a controlled evacuation, should one ever be needed."

Specialist Detectors

Apollo offer several types of detector for specialist applications including Duct Detectors, Flame Detectors and Beam Detectors. These are all designed for very specific circumstances covering commercial heating and ventilation ducts, dirtier environments where flaming fires may be expected and protection of large open spaces.

Apollo offer an extensive range of Specialist Detectors suitable for a wide variety of applications.

There are many important factors to consider when deciding which specialist detector to select, if you have specialist needs for fire detection please contact our Product Support Department, details of which can be found on the Apollo website.

Heating & ventilation ducts

Duct detectors will detect smoke within the heating and ventilation ducts of large commercial buildings.

Manufacturing, printing & waste

IR Flame Detectors will tolerate dirtier environments such as waste handling plants, colour printing facilities and paper manufacturers.
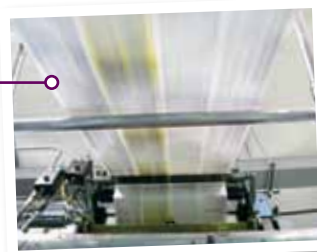
Theatres & sports centres

Beam detectors can project an infra-red light up to 100m and a height of 25m making them perfect for large open spaces such as theatres and sports facilities.

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Duct Detectors

Duct detectors are designed for detecting smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial applications.

They comprise a purpose-built housing complete with integral tubing, which samples the fast-moving air so that the detector can operate in the normal way.

Please check the Apollo website on a regular basis for up-to-date approvals information.

Intelligent Duct Smoke Detector

The Intelligent Duct Smoke Detector provides early detection of smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial premises. Its purpose is to prevent the re-circulation of smoke from an area on fire to areas unaffected by the fire when used with a XP95 or Discovery detector.

• Operates in air speeds of 0.5m/s to 20m/s
• Transparent cover to view detector head LED
• Integral smoke test port

53546-022
Intelligent Duct Smoke Detector

Conventional Duct Smoke Detector

The Conventional Duct Smoke Detector provides early detection of smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial premises. Its purpose is to prevent the re-circulation of smoke from an area on fire to areas unaffected by the fire when used with a Series 65 or Orbis detector. It provides a volt-free changeover relay rated at 30V, 1A.

• For use with Series 65 or Orbis detectors
• Operates in air speeds of 0.5m/s to 20m/s
• Transparent cover to view detector head LED
• Integral smoke test port
• Volt-free contacts

53546-021
Series 65 Duct Smoke Detector
53546-023
Orbis Duct Detector

Extension tubes

The duct smoke detector is designed to operate in ducts with a width of between 300mm and 3000mm. A sampling tube of 360mm, suitable for duct widths up to 540mm, is supplied as standard.

Longer sampling tubes may be ordered separately:

Duct width	
300-750 mm	53541-170
750-1500 mm	53541-171
1500-3000 mm	53541-172

SPECIALIST DETECTORS

! Have you seen the latest technology solutions from Apollo, including OpenConnect? See page 11 for more information or visit www.open-connect.co.uk

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Flame Detectors

Flame detectors are effective in protecting areas where flaming fires may be expected.

There is a choice of detection techniques – ultraviolet (UV), infra-red (IR) or a combination of both:
- IR^2: High immunity to false sources (indoor areas)
- IR^3: Excellent immunity to false sources (indoor or outdoor areas)
- UV/IR^2: Highest immunity to false sources (indoor or outdoor areas)

UV flame detectors are generally used in engine rooms, factories and warehouse applications.

IR flame detectors are able to tolerate dirtier environments which may block UV radiation and are generally used in applications such as waste handling, colour printing and paper manufacturing.

Apollo's range of flame detectors comply with EN54-10.

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LOSS PREVENTION CERTIFICATION BOARD
LPCB

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products   www.apollo-fire.co.uk   +44 (0) 2392 492 412

Intelligent IR^2 Flame Detector

Intelligent IR^3 Flame Detector

Intelligent Flameproof IR^2 Flame Detector

The Intelligent IR^2 Flame Detector is designed for harsh environments in indoor applications. The detector has two sensors which respond to different IR wavelengths to discriminate between flames and spurious sources of radiation.

- Loop-powered
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- Compatible with Discovery and XP95 protocols
- Remote optical self-test function
- 90° field of view
- Up to 40m coverage
- IP65 rated

55000-280
Intelligent IR^2 Flame Detector

The Intelligent IR^3 Flame Detector is designed for harsh environments in either indoor or outdoor applications. It is sensitive to low-frequency, flickering infra-red radiation emitted by flames during combustion.

- Loop-powered
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- False alarms due to lighting or flickering sunlight are minimised
- Compatible with Discovery and XP95 protocols
- 90° field of view
- Up to 40m coverage
- IP65 rated

55000-020
Intelligent IR^3 Flame Detector

The Intelligent Flameproof IR^2 Flame Detector is designed for hazardous environments in indoor applications. The detector has two sensors which respond to different IR wavelengths to discriminate between flames and spurious sources of radiation. These detectors are Baseefa approved and meet the requirements of ATEX Directive 94/9/EC.

- Sensitive to flickering IR radiation
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- Compatible with Discovery and XP95 protocols
- Remote optical self-test function
- 90° field of view
- Up to 40m coverage
- IP66 rated

55000-295
Intelligent Flameproof IR^2
Flame Detector

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Intelligent Flameproof IR³ Flame Detector

Flame Detector Bracket

Flame Detector Weather Shield

The Intelligent Flameproof IR³ Flame Detector is designed for hazardous environments in either indoor or outdoor applications. It is sensitive to low-frequency, flickering infra-red radiation emitted by flames during combustion. These detectors are Baseefa approved and meet the requirements of ATEX Directive 94/9/EC.

- Loop-powered
- Detects through films of oil, dust, water and ice
- Responds to flickering flames, including those invisible to the naked eye
- Compatible with Discovery and XP95 protocols
- 90° field of view
- Up to 40m coverage
- IP66 rated

55000-021
Intelligent Flameproof IR³
Flame Detector

The Flame Detector Bracket is an optional accessory for the Intelligent Flame Detectors. It is a stainless steel mounting bracket adjustable in two axis. Not suitable for Base Mounted Flame Detectors.

- Allows flame detector to be mounted in any orientation

29600-203 Flame Detector Bracket

The Flame Detector Weather Shield protects the device from inclement conditions.

- Protects against water ingress
- Protects sensor from direct sunlight

29600-206
Flame Detector Weather Shield

29600-228
Flame Detector Weather Shield for flameproof version

Please check the Apollo website on a regular basis for up-to-date approvals information.

Flameproof (Exd) UV/IR^2 Flame Detector

Flameproof (Exd) IR^2 Flame Detector

Flameproof (Exd) IR^3 Flame Detector

The Flameproof UV/IR^2 Flame Detector is designed for hazardous environments in either indoor or outdoor applications where open fires may be expected. False alarms from flickering sunlight, arc welding or lightning are avoided by the combination of UV and dual IR signal processing techniques. It detects almost all flames, including those invisible to the naked eye, e.g. hydrogen fires. Certified by ISSOP for compliance with standards EN50014, EN50018 and EN50281.

- ATEX certified: II 2 G D
- CENELEC/IEC certified: EEx d – IIC T6- [Zones 1, 21, 2 and 22]
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- Highest optical interference immunity
- Selectable output options: Conventional two-wire, 4-20mA, Relay Contacts – Fire/Fault, Pre-alarm, Latching or Non-Latching
- Selectable response speed
- Remote control self-test
- Low power consumption
- IP66 rated
- Supply voltage 14 to 30Vdc
- Operating temperature -10°C to +55°C

55000-065
Flameproof (Exd) UV/IR^2 Flame Detector

The Flameproof IR^2 Flame Detector is designed for use in hazardous environments in indoor applications. The combination of filters and signal processing allows the sensor to be used with a very low risk of false alarms in difficult situations characterised by factors such as flickering lights. Baseefa has certified the detector for compliance to standards EN 60079-0, EN 60079-1 and EN 61241-1.

- ATEX & IECEx certified: II 2GD Ex d IIC T4 Gb Ex tb IIIC T135°C Db IP66 A21 [Zones 1, 21, 2 and 22]
- Selectable output options: Conventional 2 wire, 4-20mA, Latching or Non-Latching, Relay Contacts – Fire/Fault, Pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption
- IP66 rated
- Supply voltage 14 to 30Vdc
- Operating temperature -10°C to +55°C

55000-061
Flameproof (Exd) IR^2 Flame Detector

The Flameproof IR^3 Flame Detector is designed for use in hazardous environments in indoor and outdoor applications. It is sensitive to low-frequency flickering infra-red radiation emitted by flames during combustion. The sensor operates even through a layer of oil, dust, water vapour or ice. Baseefa has certified the detector for compliance to standards EN 60079-0, EN 60079-1 and EN 61241-1.

- ATEX & IECEx certified: II 2GD Ex d IIC T4 Gb Ex tb IIIC T135°C Db IP66 A21 [Zones 1, 21, 2 and 22]
- Selectable output options: Conventional 2 wire, 4-20mA, Latching or Non-latching, Relay Contacts – Fire/Fault, Pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption
- IP66 rated
- Supply voltage 14 to 30Vdc
- Operating temperature -10°C to +55°C

55000-062
Flameproof (Exd) IR^3 Flame Detector

SPECIALIST DETECTORS

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IS IR^3
Flame Detector

UV/IR^2
Flame Detector

IR^2 and IR^3
Flame Detectors

The IS IR^3 Flame Detector is designed for harsh environments in either indoor or outdoor applications. It is sensitive to low-frequency flickering IR radiation emitted from flames during combustion. The sensor operates even through a layer of oil, dust, water vapour or ice. These detectors have been approved by Baseefa to EN50014, EN50020 and EN50284. The requirements of Directive 94/9/EC, the Atmosphere Explosives ATEX Directive have also been met.

- ATEX certified: II 1 G
- CENELEC/IEC certified: Ga Ex ia IIC T4
- Selectable output options: Conventional two-wire, 4-20mA, Latching or Non-latching, Relay Contacts – Fire/Fault, Pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption
- IP65 rated
- Supply voltage 14 to 30Vdc
- Operating temperature -10°C to +40°C (T4)

55000-063 IS IR^3 Flame Detector

The combination of UV and IR^2 detection, plus signal processing allows the sensor to be used without risk of false alarms in difficult situations characterised by factors such as flickering blackbody by radiation or arc welding.

- Selectable output options: Conventional two-wire, 4-20mA, Latching or Non-latching, Relay Contacts – Fire/Fault, Pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption
- IP65 rated
- Supply voltage 14 to 30Vdc
- Operating temperature -10°C to +55°C

55000-064 UV/IR^2 Flame Detector

The IR^2 and IR^3 Flame detectors are designed for harsh environments in indoor applications. The detectors have two or three sensors retrospectively which respond to different IR wavelengths to discriminate between flames and spurious sources of radiation.

- Selectable output options: Conventional two-wire, 4-20mA, Latching or Non-latching, Relay Contacts – Fire/Fault, Pre-alarm
- Class 1 sensitivity to EN54-10 detects 0.1m^2 fire at 25m
- High optical interference immunity
- Selectable response speed
- Optical self-test
- Low power consumption
- IP65 rated
- Supply voltage 14 to 28Vdc
- Operating temperature -10°C to +55°C

55000-060 IR^2 Flame Detector
55000-019 IR^3 Flame Detector

Please check the Apollo website on a regular basis for up-to-date approvals information.

Intelligent Base Mounted UV Flame Detector

Intelligent Base Mounted UV Dual IR Flame Detector

Intelligent Base Mounted Triple IR Flame Detector

Conventional Base Mounted UV Flame Detector

SPECIALIST DETECTORS

The Intelligent Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

• Responds to stationary flames with no flicker
• Sensitive to UV radiation emitted by flames during combustion
• Compact flame detector which fits into Discovery or XP95 bases
• Loop-powered

55000-022
Intelligent Base Mounted UV Flame Detector

29600-458
Base Mounted Flame Detector Bracket*

The Intelligent Base Mounted UV Dual IR Flame Detector is designed to protect open indoor areas such as aircraft hangers, generator rooms and paint works where open flaming fires may be expected. The detector has UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

• Sensitive to UV and low-frequency flickering IR radiation emitted by flames during combustion
• Compact flame detector which fits into Discovery or XP95 bases
• Loop-powered
• False alarms due to electrical discharges from lightning or arc welding and flickering sunlight are minimised

55000-023
Intelligent Base Mounted UV Dual IR Flame Detector

29600-458
Base Mounted Flame Detector Bracket*

The Intelligent Base Mounted Triple IR Flame Detector is designed to protect all indoor areas, even in dirty or smoky conditions, where open flaming fires may be expected. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

• Sensitive to low-frequency flickering IR radiation emitted by flames during combustion.
• Compact flame detector which fits into Discovery or XP95 bases
• Loop-powered
• False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques

55000-024
Intelligent Base Mounted Triple IR Flame Detector

29600-458
Base Mounted Flame Detector Bracket*

The Conventional Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open flaming fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

• Responds to stationary flames with no flicker
• Sensitive to UV radiation emitted by flames during combustion
• Compact flame detector which fits into Series 65 bases
• Zone-powered
• To be used with either Series 65 or Orbis Systems

55000-025
Conventional Base Mounted UV Flame Detector

29600-458
Base Mounted Flame Detector Bracket*

*Combines a bracket and Deckhead Mounting Box (45681-217).

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Beam Detectors

Beam Detectors offer a cost effective solution for protecting large open spaces. One single unit installed on a wall can detect smoke over an area up to 1500m² (BS5832), which is beyond that of traditional point detectors. Beams are therefore ideal for protecting areas such as warehouses, theatres and sports centres.

Types of Beam Detector:
- Self-Aligning: comprises a combined transmitter/receiver which is operated through a low-level, easy-access control console. As the name suggests the detector compensates for building movement.
- Reflective: the combined transmitter/receiver projects a beam to a prism mounted on an opposite wall.
- End-to-End: consists of a separate transmitter, receiver and interface.

There are many important factors to be considered when deciding which beam detector to select, and in case of doubt please contact our Product Support Department, details of which can be found on the Apollo website.

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Please check the Apollo website on a regular basis for up-to-date approvals information.

Auto-Aligning Beam Detector with laser alignment

The high performance Auto-Aligning Beam Detector comprises ground level controller, detector head with auto-aligning feature, integral laser for rapid initial alignment and single prism. Up to three additional detector heads can be added to the controller.

- Auto compensates for building movement and contamination
- IP54 rated
- Use XP95 Switch Monitor to interface
- Integral laser and auto-align enable quicker installation
- Low level system controller with LCD display and user friendly interface

29600-524
Auto-Aligning Beam Detector 8-50m

29600-525
Additional Detector Head 8-50m

29600-526 Extension Kit 100m

29600-527
Universal Bracket (for use with detector head and prism mounting plates)

29600-528
Surface Mounting Plate for prisms

29600-529
Prism Mounting Plate (4 prisms 100m)

29600-530
Prism Mounting Plate (1 prism 8-50m)

Auto-Aligning Beam Detector

The Auto-Aligning Beam Detector includes a ground level controller, a detector head with auto-aligning feature and one prism with an operating range of 5-40m.

- Ground level controller
- Auto compensates for building movement
- Current consumption 3.5mA
- IP65 rated
- Use XP95 Switch Monitor to interface to an addressable loop

29600-350
Auto-Aligning Beam Detector 5-40m

29600-351 Extension Kit 40-80m

29600-352 Extension Kit 80-100m

29600-353 Adaptor Plate

Intelligent Reflective Beam Detector

The Intelligent Reflective Beam Detector differs from a traditional beam detector in that it is a single unit which houses a transmitter, a receiver and the control electronics. The beam detector is available in two versions: a single reflector model for distances of 5-50m and a more powerful four-reflector unit for distances of 50-100m.

- Loop-powered
- Compatible with Discovery and XP95 protocols
- Incorporates a short-circuit isolator
- Automatic drift compensation
- Automatic reset following alarm or fault condition

55000-268
Intelligent Reflective Beam Detector 5-50m

55000-273
Intelligent Reflective Beam Detector 50-100m

! For the Mini Switch Monitor see page 103.

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Conventional End-to-End Optical Beam Detector

Reflective Beam Detector Backbox

This Conventional End-to-End Optical Beam Detector has been designed using the latest optical technology. It is ideal for applications where line of sight for the IR (infra-red) detection path is narrow and where the building structure uses reflective surfaces.

- Full icon-based, easy-to-use LCD display on the low level controller for ease of commissioning, testing and maintenance
- Aesthetically pleasing to suit modern architectural buildings and heritage sites
- Range 5 to 120 metres
- Laser assisted alignment combined with easy to use alignment LED's enables installation by one operator
- Separate Fire/Fault Relays per Detector
- Selectable sensitivity/threshold levels
- Automatic Gain Control (AGC) for drift compensation

29600-929
Conventional End-to-End Optical Beam Detector

29600-930
F3K Single Heads Set EN Boxed (additional heads)

29600-931
FIRERAY3000 Adjustment Bracket*

The Reflective Beam Detector Backbox allows easy first fixing of the cabling and terminations to the Intelligent Reflective Beam Detector (55000-268 & 55000-273). The backbox can be surface or flush mounted.

- Aesthetically pleasing

29600-241
Reflective Beam Detector Backbox

> ! **Apollo offer a series of one day training courses. See page 15 for more information.**

*Adjustment bracket offers up to 180 degrees movement in both planes and a full 360-degree rotation. It also fits 29600-524 and 29600-525 heads.

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Audio Visual

Apollo offer a wide range of Audio Visual (AV) signalling devices – sounders, visual indicators, sounder visual indicators and sounder visual indicator bases for use in conjunction with their range of conventional and intelligent detectors to meet the requirements of the Disability Discrimination Act (DDA).

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WORLD CLASS FIRE SOLUTIONS

Multi-Tone Open-Area Sounder

Intelligent Open-Area Sounder

Multi-Tone Weatherproof Open-Area Sounder

The Multi-Tone Open-Area Sounder is designed for use in open areas and can be connected to any Discovery or XP95 system.

- Updated to include choice of tones: Apollo, Slow Whoop and DIN
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of tones
- Individual and group addressing
- Loop-powered
- Red or white options
- IP21C rated

55000-278
Multi-Tone Open-Area Sounder (red)

55000-279
Multi-Tone Open-Area Sounder (white)

The Intelligent Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery or XP95 system.

- For use with XP95 and Discovery systems
- Self-test fault monitoring
- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of tones
- Individual and group addressing
- Built-in isolator
- Red or white options
- Loop-powered
- IP65 rated

55000-001
Intelligent Open-Area Sounder (red)

55000-002
Intelligent Open-Area Sounder (white)

The Multi-Tone Weatherproof Open-Area Sounder is designed for use in open areas and can be connected to any Discovery or XP95 system. The sounder comprises a backbox and sounder unit supplied together.

- Updated to include choice of tones: Apollo, Slow Whoop and DIN
- IP66 rated
- Synchronisation of tones
- Individual and group addressing
- Non-isolated
- Loop-powered
- Red or white options
- Output 100dB(A)

55000-274
Multi-Tone Weatherproof Open-Area Sounder (red)

55000-275
Multi-Tone Weatherproof Open-Area Sounder (white)

Please check the Apollo website on a regular basis for up-to-date approvals information.

Intelligent Open-Area Visual Indicator

Loop-Powered Visual Indicator

Visual Indicator Enclosure

Discovery Open-Area Sounder Visual Indicator

The Intelligent Open-Area Visual Indicator has been developed for use in situations where there is a risk that sounders will not be heard.

- For use for XP95 & Discovery systems
- Self-test fault monitoring
- IP65 rated
- Individual and group addressing
- Synchronisation of flashes
- Comes with isolating base as standard
- Loop-powered
- Red and clear lens options

55000-009
Intelligent Open-Area Visual Indicator (red lens)

55000-010
Intelligent Open-Area Visual Indicator (clear lens)

The Loop-Powered Visual Indicator is a local-area visual indicator designed for indoor use. The visual indicator has been developed as a supplement to sounders for use in situations where there is a risk that sounders will not be heard.

- High intensity LEDs
- Automatic LED check
- Lockable
- Wide angle of visibility
- Enables DDA compliance
- Synchronised flash

55000-877
Loop-Powered Visual Indicator (red)

55000-879
Loop-Powered Visual Indicator (amber)

55000-878
Loop-Powered Visual Indicator (clear lens / red flash)

The Visual Indicator Enclosure is weatherproof and allows Apollo's loop-powered visual indicator to be used in high-moisture environments such as swimming pools and food processing areas where wash-down occurs. The enclosure is supplied with a mounting bracket to accept a Discovery or XP95 base.

- Protects against water ingress
- Allows visual indicator to be used outdoors
- Accepts MiniDisc remote indicator
- IP67

29600-318 Visual Indicator Enclosure

The Discovery Open-Area Sounder Visual Indicator makes full use of the Discovery protocol and has been designed for use in indoor and open areas. When the fire system is being commissioned a magnetic wand can be used to adjust and test each sounder locally.

- 15 tone pairs
- It is possible to set individual control of the sounder and visual indicator
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition to warning of fire making the device ideal for use in schools etc
- Soft start option, ideal for hospitals and nursing homes
- Group and global control for increased response time

Discovery Open-Area Sounder Visual Indicator:
58000-005 Red lens
58000-007 White lens

29650-001 Magnetic Wand

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Discovery Open-Area Voice Sounder and Sounder Visual Indicator

Intelligent Open-Area Sounder Visual Indicator

Multi-Tone Open-Area Sounder Visual Indicator

Weatherproof Multi-Tone Open-Area Sounder Visual Indicator

The Discovery Open-Area Voice Alarm devices comprise a sounder and a sounder visual indicator that have been designed to provide clear instructional messages through the Discovery protocol. They are loop-powered wall mounted devices.

- Four pre-set message pairs, capable of up to 15 tone message pairs
- Low current and high volume
- Fully synchronised
- Set-up and test at point of installation

Discovery Open-Area Voice Sounder:
58000-010 Red
58000-020 White
Discovery Open-Area Voice Sounder Visual Indicator:
58000-030 Red
58000-040 White

The Intelligent Open-Area Sounder Visual Indicator is designed for use in open areas and can be connected to an Apollo Discovery or XP95 system.

- Self-test monitoring
- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- Two volume settings 92dB(A) and 100dB(A)
- Individual and group addressing
- Synchronisation of tones and flashes
- Built-in isolator
- Loop-powered
- IP65 rated
- Red and clear lens options

55000-005
Intelligent Open-Area Sounder Visual Indicator (red lens)
55000-006
Intelligent Open-Area Sounder Visual Indicator (clear lens)

The Multi-Tone Open-Area Sounder Visual Indicator is designed for use in indoor open areas and can be connected to any Discovery or XP95 system. The sounder visual indicator complements Apollo's intelligent and integrated base sounders as well as the multi-tone open-area sounder.

- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of 'alert' and 'evacuate' tones
- Individual and group addressing
- Built-in isolator
- IP21C

55000-293
Multi-Tone Open-Area Sounder Visual Indicator (red)
55000-294
Multi-Tone Open-Area Sounder Visual Indicator (white)

The Weatherproof Multi-Tone Open-Area Sounder Visual Indicator is designed for use in outdoor open areas and can be connected to any Discovery or XP95 system. The sounder visual indicator complements Apollo's intelligent and integrated base sounders as well as the multi-tone open-area sounder.

- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- IP66 rated
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of 'alert' and 'evacuate' tones
- Individual and group addressing
- Built-in isolator

55000-298
Weatherproof Multi-Tone Open-Area Sounder Visual Indicator with Isolator (red)
55000-299
Weatherproof Multi-Tone Open-Area Sounder Visual Indicator with Isolator (white)

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Integrated Base Sounder

The Integrated Base Sounder comprises a base sounder with integral mounting base and is for use with Discovery or XP95 detectors. It is designed for indoor use.

- Two tones
- Two volume ranges 55-75dB(A) and 75-91dB(A)
- Individual and group addressing
- Unique acoustic self-test
- Built-in isolator

45681-277
Integrated Base Sounder

45681-290
Integrated Base Sounder slow whoop

45681-300
Integrated Base Sounder DIN-tone

45681-293 Red cap

45681-292 White cap

Ancillary Base Sounder

The Ancillary Base Sounder is a local-area sounder designed for indoor use. It can be connected only to detection systems using Discovery or XP95 detectors and control panels with appropriate software.

- Sound output of 85dB(A) at 1 metre
- Current consumption of only 3mA
- Loop-powered
- Responds to signals from the associated detector – does not have an address of its own
- Adjustable volume control

45681-276
Ancillary Base Sounder

Series 65 Sounder Base

The Series 65 Sounder Base is a high-efficiency conventional alarm sounder incorporating a base for the Series 65 range of detectors. The sounder base can be secured to a conduit box or surface mounted.

- 32 tones as standard
- Provides detection and alarm signal at one point
- Diode option available

45681-512
Series 65 Sounder Base

45681-513
Series 65 Sounder Base with diode

Loop-Powered Visual Indicator Base

The Visual Indicator Base is a loop-powered visual indicator combined with a standard intelligent mounting base. It is used to signal a fire alarm in enclosed areas. The visual indicator base can be used with either a detector fitted or with a cap as a stand-alone alarm device.

- Visual indicator flash rate of once per second
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique visual indicator self-test
- Loop-powered
- Built-in Isolator

45681-333
Loop-Powered Visual Indicator Base

45681-292 White cap

45681-293 Red cap

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Sounder Visual Indicator Base

The Sounder Visual Indicator Base is a loop-powered sounder and visual indicator combined with a standard intelligent mounting base. It is used to signal a fire alarm in enclosed areas.

- Two volume ranges 55-75dB(A) and 75-91dB(A)
- Visual indicator flash rate of once per second
- Synchronisation of 'alert' and 'evacuate' tones
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique acoustic and visual indicator self-test
- Built-in isolator

45681-330
Sounder Visual Indicator Base

45681-332
Sounder Visual Indicator Base Slow Whoop

45681-334
Sounder Visual Indicator Base DIN-tone

45681-292 White cap

45681-293 Red cap

Discovery Sounder Visual Indicator Base

The Discovery Sounder Visual Indicator Base makes full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

- It is possible to set individual control of the sounder and visual indicator
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition to warning of fire, ideal for schools
- Enables soft start option, ideal for hospitals and nursing homes
- Electronic bell tone

45681-393
Discovery Sounder Visual Indicator Base

29650-001
Magnetic Wand

Discovery Sounder Base with Isolator

The Discovery Sounder Base makes the full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

- 15 pairs of tones
- It is possible to set individual volume of the sounder from the panel
- Tones can be used for other purposes in addition to warning of fire, ideal for schools
- Enables soft start option, ideal for hospitals and nursing homes

NEW

45681-702
Discovery Sounder Base with Isolator

Non-isolated products	
Multi-Tone Open-Area Sounder Visual Indicator Red*	55000-291
Multi-Tone Open-Area Sounder Visual Indicator White*	55000-292
Weatherproof Multi-Tone Open-Area Sounder Visual Indicator Red*	55000-296
Weatherproof Multi-Tone Open-Area Sounder Visual Indicator White*	55000-297
Integrated Base Sounder*	45681-278
Integrated Base Sounder Slow Whoop*	45681-291
Loop-Powered Visual Indicator Base with Standard Flash	45681-335
Sounder Visual Indicator Base*	45681-331

*For information about UL sounder visual indicator and bases go to the UL/ULC/FM section on page 151

Please check the Apollo website on a regular basis for up-to-date approvals information.

Part 23
Approved Visual Alarm Devices

With over 30 years of industry knowledge Apollo have designed and manufactured a new range of devices, all approved to the new European standard EN54-23.

Apollo's Part 23 product offering includes:

• Sounder VAD Bases (XP95 and Discovery)
• Loop-powered VADs (Addressable)
• Multi-tone open-area sounder VAD (Indoor and Outdoor)

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Cat O. Discovery Sounder VAD Base with Isolator

NEW

The Discovery Sounder VAD Base makes full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder VAD locally.

- EN54-23 approved
- Visual indicator flash rate of 0.5Hz
- It is possible to set individual volume of the sounder from the panel
- 15 pairs of tones including IMO Code 1A 'General Emergency Alarm' and IMO Code 2 'All Clear'
- Built-in isolator

45681-700
Discovery Sounder VAD Base with Isolator

Cat O. XP95 Sounder VAD Base with Isolator

NEW

The XP95 Sounder VAD Base is a loop-powered sounder and VAD combined with a standard intelligent mounting base. It is used to signal a fire alarm in enclosed areas.

- EN54-23 approved
- Flash rate of 0.5Hz
- Synchronisation of 'alert' and 'evacuate' tones
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique acoustic and VAD self-test
- Built-in isolator

45681-705
XP95 Sounder VAD Base with Isolator

45681-706
XP95 Sounder VAD Base Slow Whoop with Isolator

45681-707
XP95 Sounder VAD Base DIN with Isolator

Cat O. XP95 VAD Base with Isolator

NEW

The XP95 VAD Base is a loop-powered VAD combined with a standard intelligent mounting base. It is used to signal a fire alarm in enclosed areas. The VAD base can be used with either a detector fitted or with a cap as a stand-alone alarm device.

- EN54-23 approved
- Flash rate of 0.5Hz
- Synchronisation of VAD flash
- Individual and group addressing
- Unique VAD self-test
- Loop-powered
- Built-in isolator

45681-709
XP95 VAD Base with Isolator

For up-to-date information on Part 23 approved products visit www.apollo-fire.co.uk

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Coming Soon

Cat C.
Loop-powered
VAD

NEW

The Loop-powered VAD is designed for indoor use. The VAD is specifically designed for use on a ceiling and comes in two different coverage classes. The two EN54-23 coverage classes are C-3-8 and C-3-15. These devices are to supplement sounders in areas where there is a risk that sounders will not be heard.

• **EN54-23 approved**
• **High intensity LED**
• **Lockable**
• **Available in red and white**
  (white flash only)

55000-740
Loop-powered VAD 15m (red)

55000-742
Loop-powered VAD 8m (red)

55000-743
Loop-powered VAD 15m (white)

55000-745
Loop-powered VAD 8m (white)

38531-822
Module Base

Cat W.
Loop-powered
VAD

NEW

The Loop-powered VAD is designed for indoor use. The VAD is specifically designed for use on the wall. The EN54-23 coverage class for this device is W-2.4-6. These devices are to supplement sounders in areas where there is a risk that sounders will not be heard.

• **EN54-23 approved**
• **High intensity LED**
• **Lockable**
• **Available in red and white**
  (white flash only)

55000-741
Loop-powered VAD 6m (red)

55000-744
Loop-powered VAD 6m (white)

38531-822
Module Base

PART 23
APPROVED VADs

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Case Study
A Gothic Challenge: Exeter Cathedral

Summary	
Project Name:	Exeter Cathedral
Location:	Exeter, UK
Market:	Government
Products used:	Products from the XPander and XP95 range.
Installer:	Technical Alarm Systems

Exeter Cathedral is located within the heart of the city of Exeter, one of the most visited places within the West Country. The building is one of the finest examples of Gothic architecture in the country featuring the longest uninterrupted stretch of decorated vaulting in the world. In addition to the regular services held at the site the Cathedral has been providing education facilities for schools for more than 25 years. These facilities have been situated in two rooms off the cloisters within the Cathedral, however, thanks to a grant from the Heritage Lottery Fund (HLF), the upper floor of the cloisters will be transformed into a dedicated learning space, providing modern learning facilities whilst retaining the historic legacy of the building.

Apollo fire detectors are already in place protecting this unique piece of the UK's history thanks to equipment supplied and commissioned by Southampton based Technical Alarm Systems (TAS). The company is currently working on the second of a three phase project which includes connecting the Cathedral's library to the main fire system. TAS is using Apollo's XPander technology which communicates via radio signals, removing the need for any unsightly wiring and invasive drilling and making it an ideal detection solution for architecturally sensitive buildings.

The third phase of the work will involve installing equipment in the new education rooms based in the Cathedral's cloister area. Using Apollo's XP95 range which will be networked onto the existing system, TAS has customised the equipment to blend into the surroundings (which include stone and wooden fixtures) to maintain the aesthetics of the rooms without being obtrusive.

TAS Managing Director, Stan Brooke, comments: "We have been working on this project at the Cathedral for the last four years and Apollo was the natural choice for us. We've worked with them for more than 25 years and as such we know we can trust the equipment. In particular, its wireless XPander range was essential for the work undertaken in the library due to the architecturally sensitive nature of the ceiling. We've used Apollo time and time again and have always been happy with the quality of detection its products deliver."

XPANDER®   **XP**95

Please check the Apollo website for more case studies.

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Interfaces

Apollo manufactures a comprehensive range of interfaces for systems which enable fire protection solutions to be engineered simply and effectively without the need for custom-designed equipment. There are a variety of interfaces available to suit a number of individual applications.

Interfaces Range

	Standard Enclosure	DIN-Rail Enclosure	Miniature Enclosure
Mini Switch Monitor			●
Mini Switch Monitor (with fly leads)			●
Mini Switch Monitor [interrupt]			●
Mini Monitor Module			●
Switch Monitor	●	●	
Switch Monitor Plus	●	●	
Zone Monitor	●	●	
Sounder Control Unit	●		
Input/Output Unit	●	●	
Output Unit	●	●	
Sounder Controller (5 Amperes)		●	
Sounder Controller	●		
Dual Isolator		●	
3 Channel Input/Output Unit*	●		
Main Switching Input/Output Unit	●	●	

*Standard Enclosure specific to 3 Channel Input/Output Unit

INTERFACES

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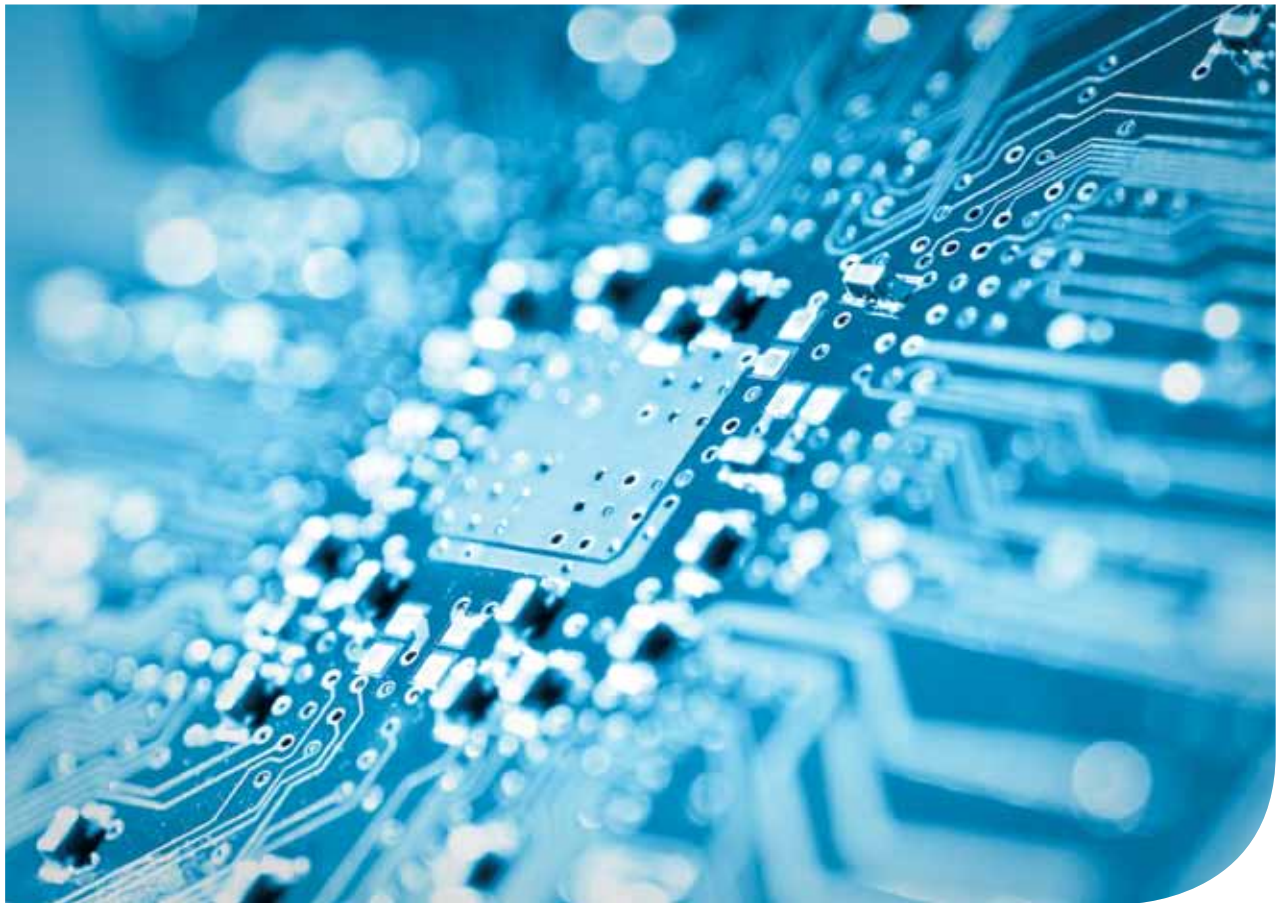
Standard

Standard interfaces are fitted with bi-directional short-circuit isolators so that they are unaffected by a single short-circuit on either loop input or output. The exception to this is the Mains Input/Output Unit which is not isolated.

Key features of Apollo Interfaces:

- Easy to install
- Well protected
- Modular design
- A neat solution

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interfaces
FOR INTELLIGENT SYSTEMS

Find out more about all interfaces at www.apollo-fire.co.uk/interfaces

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Input/Output Unit

Three Channel Input/Output Unit

Output Unit

The Input/Output Unit provides a voltage-free, double pole changeover (DPCO) relay output, a single monitored switch input and an unmonitored, non-polarised opto-coupled input.

- It can report fault, switch open and switch closed levels
- Three visible LEDs
- Loop-powered
- Capable of switching up to 30V at 1A

55000-847 Input/Output Unit

The Three Channel Input/Output Unit provides three voltage-free, single pole, changeover relay outputs and three monitored switch inputs.

- Supervises one or more normally open switches on each of the three inputs
- Loop-powered
- Capable of switching up to 30V at 1A on each of the three outputs

55000-588
Three Channel Input/Output Unit

The Output Unit provides a voltage-free single pole, changeover relay output. It is a simplified version of the Input/Output Unit without circuitry for monitoring inputs.

- Capable of switching up to 30V at 1A

55000-849 Output Unit

INTERFACES

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Sounder Control Unit

Switch Monitor

Switch Monitor Plus

The Sounder Control Unit is used to control the operation of a zone of conventional sounders and report their status to the control panel.

- Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
- May be synchronised with loop sounders

55000-852 Sounder Control Unit

The Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue control equipment.

- Four input states – 'normal', 'fault', 'pre-alarm' and 'alarm'
- Two visible LEDs
- Loop-powered

55000-843 Switch Monitor

The Switch Monitor Plus is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue control equipment.

- Output for resetting a remote detector
- Four input states – 'normal', 'fault', 'pre-alarm' and 'alarm'
- Two visible LEDs
- Selectable alarm delay for monitoring flow switches

55000-841 Switch Monitor Plus

! **For help selecting the interface that meets your particular needs, visit the website www.apollo-fire.co.uk**

Please check the Apollo website on a regular basis for up-to-date approvals information.

Zone Monitor

The Zone Monitor powers and controls the operation of a zone of up to 20 Apollo Series 65 or Orbis fire detectors from a Discovery or XP95 loop.

• Loop-powered
• LED alarm indication

55000-845 Zone Monitor

Mains Switching Input/Output Unit

The Mains Switching Input/Output Unit provides a voltage-free, single pole changeover relay output and a monitored switch input.

• Supervises one or more normally-open switches connected to a single pair of cables
• Three visible LEDs
• Capable of switching 250V AC at up to 5A

55000-875
Mains Switching Input/Output Unit*

Locally Powered Zone Monitor

Powers and controls the operation of a zone of Apollo Series 65 or Orbis detectors from a Discovery or XP95 loop.

• Supplied with a polycarbonate back box for surface mounting

55000-864
Locally Powered Zone Monitor

With the exception of the Mains Switching Input/Output Unit, Apollo's range of standard interfaces without isolators has been discontinued. The alternatives are listed to the right.

Standard interfaces with and without isolators

	Without Isolator	With Isolator
Input/Output Unit	55000-818	55000-847
3 Channel Input/Output Unit	55000-589	55000-588
Output Unit	55000-819	55000-849
Sounder Control Unit	55000-823	55000-852
Switch Monitor	55000-810	55000-843
Switch Monitor Plus	55000-809	55000-841
Zone Monitor	55000-813	55000-845
Main Switching Input/Output Unit	55000-875	N/A

INTERFACES

* Not isolated.

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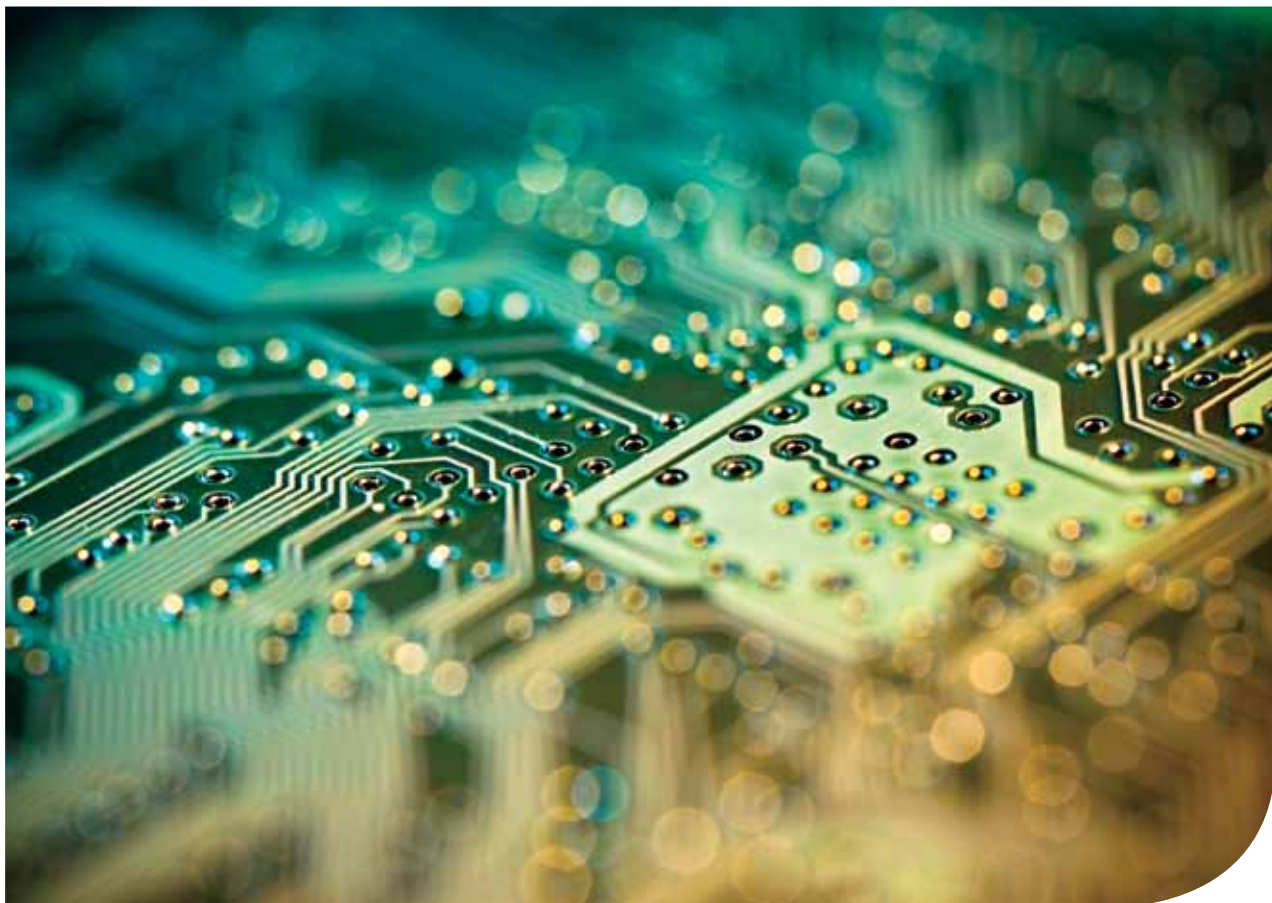
DIN-Rail

DIN-Rail interfaces feature enclosures that clip to standard 35mm DIN-Rails or are screwed to the base of a larger enclosure. They enable fire system designers to create multi-purpose interfaces for individual sites.

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DIN-Rail Input/Output Unit

DIN-Rail Output Unit

DIN-Rail Switch Monitor

DIN-Rail Mains Input/Output Unit

The DIN-Rail Input/Output Unit provides a voltage-free, single pole, changeover relay output, a single, monitored switch input and an unmonitored, non-polarised opto-coupled input.

• It can report fault, switch open and switch closed levels
• Three visible LEDs
• Loop-powered
• Capable of switching up to 30V at 1A

55000-803
DIN-Rail Input/Output Unit

The DIN-Rail Output Unit provides a voltage-free single pole, changeover relay output. It is a simplified version of the Input/Output Unit without circuitry for monitoring inputs.

• Capable of switching up to 30V at 1A
• Loop-powered

55000-804
DIN-Rail Output Unit

The DIN-Rail Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue addressable control equipment.

• Four input states – 'normal', 'fault', 'pre-alarm' and 'alarm'
• Two visible LEDs
• Loop-powered

55000-822
DIN-Rail Switch Monitor

The DIN-Rail Mains Input/Output Unit provides a voltage-free, single pole changeover relay output and a monitored switch input. The unit supervises one or more normally-open switches connected to a single pair of cables.

• It can report fault, switch open and switch closed levels
• Three visible LEDs
• Capable of switching up to 8A at 250V AC
• Fits a standard 35mm DIN-Rail

55000-797
DIN-Rail Mains Input/Output Unit

INTERFACES

> **!** **Apollo offer a series of one day training courses. See page 15 for more information.**

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DIN-Rail Dual Isolator

The DIN-Rail Dual Isolator provides two independent isolators which sense and isolate short-circuits on Discovery or XP95 loops and spurs.

• Loop-powered
• Polarity sensitive
• Up to 20 detectors can be installed between isolators
• Allows fully isolated spurs

55000-802 DIN-Rail Dual Isolator

DIN-Rail Sounder Controller (5 Amperes)

The DIN-Rail Sounder Controller (5 Amperes) is used to control the operation of a zone of externally powered sounders and report their status to the control panel.

• Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
• May be synchronised with loop sounders.
• An opto-coupled input is provided to monitor the state of the external power supply
• Features group addressing
• Will accept a load of up to 5A

55000-182
DIN-Rail Sounder Controller (5 Amperes)

DIN-Rail Switch Monitor Plus

The DIN-Rail Switch Monitor Plus is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue addressable control equipment.

• Output for resetting a remote detector
• Four input states - 'normal', 'fault', 'pre-alarm' and 'alarm'
• Two visible LEDs
• Loop-powered
• Selectable alarm delay for monitoring flow switches

55000-821
DIN-Rail Switch Monitor Plus

Please check the Apollo website on a regular basis for up-to-date approvals information.

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DIN-Rail Zone Monitor with Isolator

DIN-Rail Interface Enclosures

Mini Switch Monitor

The DIN-Rail Zone Monitor with Isolator powers and controls the operation of a zone of up to 20 Apollo Series 65 or Orbis fire detectors from a Discovery or XP95 loop.

• Loop-powered
• Visible short-circuit and alarm LEDs
• Built-in Isolator

55000-812
DIN-Rail Zone Monitor with Isolator

DIN-Rail Interface Enclosures are available in two sizes and can be used for housing intrinsically safe (IS) barriers or DIN-Rail mounted interfaces. A multi-purpose label that features a section for use with IS systems is supplied. For non-IS systems, the part referring to IS can simply be removed.

• Allows multiple interfaces to be housed together
• IP67 rated

29600-239
DIN-Rail Interface Enclosure (4 units)
29600-240
DIN-Rail Interface Enclosure (10 units)

The Mini Switch Monitor is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, for example a manual call point. It is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue addressable control equipment.

• Designed for use where space is limited
• Isolated as standard
• Interrupt/non interrupt in one unit
• 'Pre-alarm' status available
• Three coloured LEDs giving clear status indication

55000-760 Mini Switch Monitor

INTERFACES

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Apollo Manufactured Manual Call Points

Apollo's Manufactured Manual Call Points comply with European Standard EN54-11:2001 and have been designed to make installation and testing quick, easy and cost effective.

Introducing an extensive collection of EN54-11:2001 approved manual call points manufactured by Apollo. Complementing the variety of products available in our analogue addressable ranges. As standard, every Manual Call Point is available with a resettable element, front LED indicator and a backbox for surface mounting as well as the following key features.

DISCOVERY® **XP95®**

Key features of Apollo's Manual Call Points include:

- Flashing LED option to indicate polling (Discovery systems only)
- Easy access, front reset mechanism
- Front facing addressing
- E-Z Fit connectors
- Ergonomically designed key-shape
- EN54-11 approved
- Continuity link

- Highly visible alarm
- Backward compatibility and retro-fit
- Flush mount and back-box installs
- Reports an activation in under 0.2 seconds
- Resettable element
- Anti-tamper front face
- IP67 rated on all waterproof versions
- Captive screws on all waterproof versions

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Apollo's Manual Call Points include a number of features designed to make installation and testing quick, easy and cost effective.

1 Apollo Discovery Manual Call Point

NEW

Apollo's Discovery Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

• EN54-11 approved (EN54-17 approved for isolator version)
• E-Z fit connectors
• Front facing addressing without the need to detach the backbox
• A unique, ergonomically designed key for resetting and front cover removal
• Backward compatibility and retro-fit
• Resettable element

58200-910
Apollo Discovery Manual Call Point

58200-908
Apollo Discovery Manual Call Point with Isolator

2 Apollo XP95 Manual Call Point

NEW

Apollo's XP95 Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. When activated, the manual call point interrupts the polling cycle for a fast response and has a combined LED indicator and front reset mechanism allowing for a quick and simple reset.

• EN54-11 approved (EN54-17 approved for isolator version)
• E-Z fit connectors
• Front facing addressing without the need to detach the backbox
• A unique, ergonomically designed key for resetting and front cover removal
• Backward compatibility and retro-fit
• Resettable element

55200-905
Apollo XP95 Manual Call Point

55200-908
Apollo XP95 Manual Call Point with Isolator

3 Apollo Waterproof Manual Call Point

NEW

Apollo's Waterproof Manual Call Point has a highly visible alarm indicator which can be seen from up to 10 metres away. The manual call point interrupts the polling cycle for a fast response, when activated. A combined LED indicator and front reset mechanism allows for a simple reset.

• IP67 rated
• EN54-11 approved (EN54-17 approved for isolator version)
• A unique, ergonomically designed key for resetting and front cover removal
• Captive screws

58200-950
Apollo Waterproof Manual Call Point

58200-951
Apollo Waterproof Manual Call Point with Isolator

1 2 3

Illustration demonstrates ease of installation for the Apollo Discovery/XP95 Manual Call Points.

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Manual Call Points

Key features of Apollo's call points include:

- Resettable element for fast testing and resetting of the device

- 'Plug and Play' terminal connections for fast wiring

- Continuity link for wiring test before call points are commissioned

- Supplied with back box for surface mounting

- Optional transparent cover to prevent
  accidental operation

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4 Discovery Manual Call Point

A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

• Flashing LED option to indicate polling (Discovery systems only)
• 'Plug and Play' terminal connections for fast wiring
• Continuity link for wiring test before commissioning
• Reports an alarm in under 0.2 seconds
• Resettable element

58100-910
Discovery Manual Call Point (surface)

58100-908
Discovery Manual Call Point with Isolator (surface)

5 XP95 Manual Call Point

A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

• 'Plug and Play' terminal connections for fast wiring
• Continuity link for wiring test before commissioning
• Reports an alarm in under 0.2 seconds
• Resettable element

55100-905
XP95 Manual Call Point (surface)

55100-908
XP95 Manual Call Point with Isolator (surface)

6 Waterproof Manual Call Point

The Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur. A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

• IP67 rated
• 'Plug and Play' terminal connections for fast wiring
• Continuity link for wiring test before commissioning
• Reports an alarm in under 0.2 seconds
• Resettable element

58100-950
Waterproof Manual Call Point

58100-951
Waterproof Manual Call Point with Isolator

58100-953
Waterproof Manual Call Point with Isolator (yellow) †

† Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

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7 Discovery
Manual Call Point
(Non-Standard)

8 Conventional
Manual
Call Point

9 AlarmSense
Manual
Call Point

Apollo offers a selection of differently coloured call points suitable for a variety of applications such as initiating a hazard rather than a fire alarm. They can be used on XP95 and Discovery systems.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an activation in under 0.2 seconds
- Resettable element

Discovery Manual Call Point (non-standard):

58100-926 White (surface) †

58100-927 Yellow (surface) †

58100-928 Blue (surface) †

58100-929 Green (surface) †

58100-930 Orange (surface) †

Apollo's Conventional Manual Call Points comply with EN54-11 and are available in both indoor and outdoor variants. Apollo also offers a yellow variant suitable for alternative applications.

- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-001
Conventional Manual Call Point without LED

55100-002
Conventional Call Point without LED yellow (non-standard) †

55100-003
Conventional Waterproof Manual Call Point without LED

55100-004
Conventional Waterproof Call Point without LED yellow (non-standard) †

The AlarmSense Manual Call Point is different from other conventional call points in that it can be detected as an operated call point rather than a detector that has changed to the alarm state.

- Red LED indicator
- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-894
AlarmSense Manual Call Point (surface)

† Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

Please check the Apollo website on a regular basis for up-to-date approvals information.

10 XPander Manual Call Point

The XPander Manual Call Point is wireless and is powered by two independent packs of three AA batteries with a typical five year life.

- Wireless
- XPERT addressing
- LED to indicate operation
- Fast response, reports alarm in under one second

XPA-MC-14006-APO
XPander Manual Call Point

11 Discovery Marine Manual Call Point

The Discovery Marine Manual Call Point has been approved for use in indoor marine applications. A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

58100-970MAR
Discovery Marine Manual Call Point

58100-971MAR
Discovery Marine Manual Call Point with Isolator

12 Discovery Marine Waterproof Manual Call Point

The Discovery Marine Manual Call Point has been approved for use in outdoor marine applications. A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

- IP67 rated
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

58100-975MAR
Discovery Marine Waterproof Manual Call Point

58100-976MAR
Discovery Marine Waterproof Manual Call Point with Isolator

13 Conventional Marine Manual Call Point

The Conventional Marine Manual Call Point has been designed to operate on conventional marine fire detection systems. It is compliant with EN54-11 and Marine Equipment Directive 96/98/EC and is available in both indoor and outdoor variants.

- Red LED indicator
- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-021MAR
Conventional Marine Manual Call Point

55100-022MAR
Conventional Marine Waterproof Manual Call Point

MANUAL CALL POINTS

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14 XP95 IS Manual Call Point

15 XP95 IS Manual Call Point – MEDC Style

16 Conventional IS Manual Call Point

17 Transparent Hinged Cover

The XP95 IS Manual Call Point is based on the standard waterproof model. It has been designed to operate on XP95 Intrinsically Safe fire detection systems. Designed specifically for use in atmospheres in which explosive mixtures are or may be present.

- IP67 rated
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

> **55100-940**
> XP95 IS Manual Call Point
>
> **55100-942**
> XP95 IS Manual Call Point yellow (non-standard)
>
> **55100-944**
> XP95 IS Manual Call Point blue (non-standard)

The XP95 Manual Call Point MEDC style is recommended for heavy duty applications. This model is made of glass-reinforced polyester and may be ordered as break-glass or push-button style.

- Robust design
- Waterproof
- Reports an alarm in under 0.2 seconds

> Break-glass:
> **55000-960** Red
>
> **55000-962** Yellow
>
> **55000-964** Blue
>
> **55000-966**
> Black/yellow stripes
>
> With flap:
> **55000-961** Red
>
> **55000-963** Yellow
>
> **55000-965** Blue
>
> **55000-967**
> Black/yellow stripes
>
> Push-button:
> **55000-970** Red
>
> **55000-971** Yellow
>
> **55000-972** Blue
>
> **55000-973**
> Black/yellow stripes

The Conventional IS Manual Call Point has been designed to operate on conventional Intrinsically Safe fire detection systems. Designed specifically for use in atmospheres in which explosive mixtures are or may be present.

- 'Plug and Play' terminal connections for fast wiring
- Resettable element

> **55100-031**
> Conventional IS Manual Call Point
>
> **55100-032**
> Conventional IS Manual Call Point yellow (non-standard)
>
> **55100-033**
> Conventional IS Waterproof Manual Call Point
>
> **55100-034**
> Conventional IS Waterproof Manual Call Point yellow (non-standard)

The Transparent Hinged Cover can be fitted to all call points excluding MEDC style to add further protection against accidental operation.

- Breakable cover seal
- Reduces risk of malicious activations

> **26729-152**
> Transparent Hinged Cover
>
> **26729-179**
> Breakable Cover Seal

Please check the Apollo website on a regular basis for up-to-date approvals information.

Mounting Accessories

Apollo offer a selection of accessories that can be used when installing Apollo's detectors, sounders and interfaces. These include backplates providing a high degree of protection from the ingress of water or dust, weatherproof visual indicator enclosures for installation outside and in high moisture environments such as swimming pools and ceiling tile mounting boxes which make installation easy prior to the fitting of a false ceiling.

MOUNTING
ACCESSORIES

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Backplate

The Backplate provides a high degree of protection against the ingress of water or dust into the back of the detector mounted directly onto a mounting box. When the backplate is used with an XP95 device, the number tab of the XPERT card must be snapped off and placed in one of the knockout slots provided in the backplate.

- Protects against dust and dirt ingress
- Improved performance
- Fits Discovery, XP95, Orbis, Series 65 and AlarmSense bases

45681-233 Backplate

Base Cover

Base Covers are available as part of the Series 65 and XP95 ranges.

- Protects base when detector not in place
- Aesthetically pleasing

45681-370 Series 65 Base Cover
45681-380 XP95 Base Cover

Conduit Box

The Conduit Box is a versatile accessory for surface mounting Apollo bases. The box has knockouts to accept PG16 or M20 cable glands, conduit or mini-trunking. Self-tapping screws are included to fit the detector base to the conduit box.

- Easy to install
- Aesthetically pleasing
- Colour matched to detector and base

45681-204 Conduit Box

> **!** **Have you seen the latest technology solutions from Apollo, including OpenConnect?**
> **See page 11 for more information or visit www.open-connect.co.uk**

Please check the Apollo website on a regular basis for up-to-date approvals information.

Sounder Ceiling Plate

The Sounder Ceiling Plate allows surface mounted cabling to be fitted to a loop-powered sounder base.

• Ease of installation

45681-311 Sounder Ceiling Plate

Module Base

The Module Base is an accessory which can be secured to a standard base allowing customers to fit their own electronics.

• 5mm in depth

38531-822 Module Base

Deckhead Mounting Box

The Deckhead Mounting Box gives extra protection to devices to be fitted in areas where there is the possibility of moisture or condensation ingressing through the rear of the base. The new version is suitable for a wider range of detector bases as well as Apollo's AV bases.

• Protects against water ingress
• Improved performance
• Available in polycarbonate or metal
• Polycarbonate deckhead mounting box (45681-217) also fits Apollo audio visual bases when used with the accessory kit (45681-218)

45681-217 Deckhead Mounting Box

29600-131
Metal Deckhead Mounting Box
(has access ports threaded to fit PG16 glands)

45681-218
Deckhead Mounting Box Accessory Kit

29600-139
Metal Deckhead Mounting Box
(has access ports threaded to fit M20 components)

27249-005
Deckhead Adaptor
(for use with 29600-196 – converts cable glands from PG16 to M20)

31523-857 O'Ring

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Ceiling Tile Mounting Box

6" Mounting Plate

Visual Indicator Enclosure

The Ceiling Tile Mounting Box has been designed to make the installation of detectors and sounders quick and easy prior to the fitting of a false ceiling. Detector and sounder bases can be fitted, wired and if necessary, tested and commissioned before the installation of a false ceiling.

- No need for separate backbox
- Can be used with tiles up to 25mm thick
- Quick and easy installation

45681-309
Detector Ceiling Tile Mounting Box

45681-310
Sounder Ceiling Tile Mounting Box

The 6" Mounting Plate is an accessory that allows sounder bases to be surface mounted.

- Can be surface mounted
- Aesthetically pleasing
- Disguises any blemishes or marks left beneath

45681-600 6" Mounting Plate

The Visual Indicator Enclosure is weatherproof allowing a loop-powered visual indicator to be installed outside and in high moisture environments such as swimming pools. The enclosure is supplied with a mounting bracket to accept a Discovery or XP95 base.

- Protects against water ingress
- Allows visual indicators to be used outdoors
- Accepts MiniDisc remote indicator
- IP67 rated

29600-318 Visual Indicator Enclosure

Please check the Apollo website on a regular basis for up-to-date approvals information.

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DIN-Rail Interface Enclosures

1.5mm Hexagonal Driver

Series 90 to XP95 Base Adaptor

Series 65 to Orbis Base Adaptor

DIN-Rail Interface Enclosures are available in two sizes and can be used for housing Intrinsically Safe (IS) barriers or DIN-Rail mounted interfaces. A multi-purpose label that features a section for use with IS systems is supplied. For non-IS systems, the part referring to IS can simply be removed.

• Allows multiple interfaces to be housed together
• IP67 rated

29600-239
DIN-Rail Interface Enclosure (4 units)

29600-240
DIN-Rail Interface Enclosure (10 units)
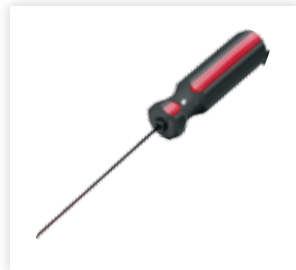
The 1.5mm Hexagonal Driver is used to turn the locking screw fitted to Discovery, XP95 and Series 65 detectors, locking the detector to the base.

• Allows detectors to be secured to the base with ease

29600-095
1.5mm Hexagonal Driver

The Series 90 to XP95 Base Adaptor is designed to allow XP95 detectors to be fitted to an existing Series 90 base. The adaptor eliminates the need to rewire an existing Apollo intelligent system.

• Allows an existing range to be updated with ease
• Eliminates the need for re-wiring

45681-238
Series 90 to XP95 Base Adaptor

The Series 65 to Orbis Base Adaptor is designed to allow Orbis detectors to be fitted to an existing Series 60 or Series 65 base. The adaptor eliminates the need to rewire an existing Apollo conventional system.

• Allows an existing range to be updated with ease
• Eliminates the need for re-wiring

ORB-BA-10008-APO
Series 65 to Orbis Base Adaptor

MOUNTING ACCESSORIES

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Marine

Apollo offer both analogue addressable and conventional ranges of smoke and heat detectors which are approved for use in the marine environment. These detectors operate in the same way and carry the same approvals as standard detectors but are subject to additional approvals tests, specific to the marine environment.

marine
& offshore

Apollo devices can be found in the largest lifting vessel in Asia and the Liao Hai roll-on-roll-off ferry (China).

DISCOVERY® orbis®

The marine detectors comply with MED and are approved by the following bodies:
- American Bureau of Shipping
- Bureau Veritas
- China Classification Society
- Det Norske Veritas
- Germanischer Lloyd
- Lloyd's Register of Shipping
- Maritime and Coastguard Agency
- Marine Marchande Française

Passenger ships & ferries

Around 200 Apollo intelligent detectors protect the Liao Hai roll-on-roll-off ferry in China.

Cargo & military vessels

The largest lifting vessel in Asia is protected using an Apollo-based fire detection system of over 400 Discovery Marine devices.

Germanischer Lloyd

Maritime and Coastguard Agency

CCS CHINA CLASSIFICATION SOCIETY 中 国 船 级 社

ABS TYPE APPROVED PRODUCT

BUREAU VERITAS 1828

Lloyd's Register TYPE APPROVED

DNV

MARINE

apollo WORLD CLASS FIRE SOLUTIONS

DISCOVERY®

marine & offshore

Discovery Marine analogue addressable fire detectors are suitable for larger vessels. The high specification range has been developed to meet the requirements of sophisticated systems. Discovery gives you total reassurance in installations where it is necessary to adapt detection to different operating environments and where protection against unwanted alarms is paramount.

Key features of Discovery Marine include:

- Approved for use in the marine environment
- Five response modes for environmental adaptation
- Day/night switching for increased flexibility
- Drift compensation for false alarm reduction
- User programmability for data retention
- XPERT card addressing for increased security

Germanischer Lloyd   mca Maritime and Coastguard Agency   CCS CHINA CLASSIFICATION SOCIETY 中 国 船 级 社   ABS TYPE APPROVED PRODUCT   BUREAU VERITAS   Lloyd's Register TYPE APPROVED   DNV
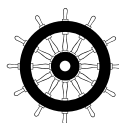
Find out more about the Discovery Marine range at www.apollo-fire.co.uk/discoverymarine

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Discovery Marine Optical Smoke Detector

The Discovery Marine Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Suitable for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Remote test feature
- Rejection of transient signals

58000-600MAR
Discovery Marine Optical Smoke Detector

Discovery Marine Multisensor Detector

The Discovery Marine Multisensor Detector comprises optical smoke and thermistor temperature sensors which give both a combined signal as well as a separate heat signal for improved false alarm management.

- Ideal for a wide range of applications
- High immunity to false alarms
- Unaffected by wind or atmospheric pressure
- Remote test feature
- Rejection of transient signals

58000-700MAR
Discovery Marine Multisensor Detector

Discovery Marine Ionisation Smoke Detector

The Discovery Marine Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Remote test feature
- Rejection of transient signals

58000-500MAR
Discovery Marine Ionisation Smoke Detector

Discovery Marine Heat Detector

The Discovery Marine Heat Detector, distinguishable by the low airflow resistant case, uses a single thermistor to sense the air temperature around the detector.

- Ideal in environments that are dirty or smoky
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-400MAR
Discovery Marine Heat Detector

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Discovery Marine Mounting Base

All detectors in the Discovery Marine range are for use with the Marine Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

• XPERT addressing
• One way fit
• Locking feature to prevent unauthorised removal

45681-210MAR
Discovery Marine Mounting Base

Discovery Marine Sounder Visual Indicator Base

The Discovery Marine Sounder Visual Indicator Base makes full use of the Discovery protocol. For ease of commissioning, a 'Magnetic Wand' can be used to test and adjust each sounder locally.

• It is possible to set individual control of the sounder and visual indicator
• Volume and tone settings can be selected from the control panel
• Electronic bell tone

45681-394MAR
Discovery Marine Sounder Visual Indicator Base
29650-001
Magnetic Wand

Marine Isolating Base

The Marine Isolating Base senses and detects short-circuit faults on Discovery loops and spurs.

45681-286
Marine Isolating Base

Discovery Marine Isolator

The Discovery Marine Isolator is placed at intervals on the loop and ensures that, in the case of a short-circuit, only the section between the isolators will be affected. When the short-circuit is removed, the isolators automatically restore power in the isolated section.

• Detects wiring short-circuits using patented technology
• Minimises disruption from short-circuits
• Automatic de-isolation on short-circuit removal
• Up to 20 detectors or equivalent load may be installed between isolators

55000-721MAR
Discovery Marine Isolator (uses 45681-211MAR Isolator Base)
45681-211MAR
Discovery Marine Isolator Base

MARINE

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Discovery Marine Manual Call Point

The Discovery Marine Manual Call Point has been approved for use in indoor marine applications such as cruise liners. When operated, the manual call point interrupts the polling cycle for a fast response.

- Reports an alarm in under 0.2 seconds
- 'Plug and Play' terminal connections for fast wiring
- Allow wiring continuity testing before fitting
- Resettable element

58100-970MAR
Discovery Marine Manual Call Point

58100-971MAR
Discovery Marine Manual Call Point with Isolator

Discovery Marine Waterproof Manual Call Point

The Discovery Marine Waterproof Manual Call Point has been approved for use in outdoor marine applications. When operated, the manual call point interrupts the polling cycle for a fast response.

- Reports an alarm in under 0.2 seconds
- 'Plug and Play' terminal connections for fast wiring
- Allow wiring continuity testing before fitting
- Resettable element
- IP67 rated

58100-975MAR
Discovery Marine Waterproof Manual Call Point

58100-976MAR
Discovery Marine Waterproof Manual Call Point with Isolator

Marine Multi-Tone Open-Area Sounder Visual Indicator (Weatherproof)

The Marine Multi-Tone Open-Area Sounder Visual Indicator is designed for use in open areas. The Sounder Visual Indicator compliments Apollo's range of marine devices.

- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- IP66 rated
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of 'alert' and 'evacuate' tones
- Individual and group addressing
- Built-in isolator

55000-398
Marine Multi-Tone Open-Area Sounder Visual Indicator (weatherproof) red with Isolator

55000-399
Marine Multi-Tone Open-Area Sounder Visual Indicator (weatherproof) white with Isolator

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Marine Multi-Tone Open-Area Sounder (Weatherproof)

Marine DIN-Rail Dual Isolator

Marine DIN-Rail Sounder Controller (8 Amperes)

Marine DIN-Rail Switch Monitor Plus

The Marine Multi-Tone Open-Area Sounder is designed for use in open areas. The sounder comprises a backbox and sounder unit supplied together.

- Choice of tones on standard device: Apollo, Slow Whoop and DIN
- IP66 rated
- Synchronisation of tones
- Individual and group addressing
- Non-isolated
- Output 100dB(A)

55000-374MAR
Marine Multi-Tone Open-Area Sounder (weatherproof) red

55000-375MAR
Marine Multi-Tone Open-Area Sounder (weatherproof) white

The Marine DIN-Rail Dual Isolator provides two independent isolators which sense and isolate short-circuits on loops and spurs.

- Loop-powered
- Up to 20 detectors can be installed between isolators
- Allows fully isolated spurs

55000-770MAR
Marine DIN-Rail Dual Isolator

The Marine DIN-Rail Sounder Controller (8 Amperes) is used to control the operation of a zone of externally powered sounders and report their status to the control panel.

- Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
- May be synchronised when in pulsed operation
- External supply monitoring
- Will accept a load of 8A

55000-181MAR
Marine DIN-Rail Sounder Controller (8 Amperes)

The Marine DIN-Rail Switch Monitor Plus is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue addressable control equipment.

- Four input states – 'normal', 'fault', 'pre-alarm', and 'alarm'
- Loop-powered
- Optional 30 second alarm delay for monitoring flow switches

55000-772MAR
Marine DIN-Rail Switch Monitor Plus

MARINE

> **!** **For our full range of Audio Visual products see page 85.**

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Marine DIN-Rail Zone Monitor

The Marine DIN-Rail Zone Monitor with isolator controls the operation of a zone of up to 20 Apollo Orbis Marine fire detectors from a loop.

• Loop-powered
• Visible short-circuit LED
• Built-in isolator

55000-773MAR
Marine DIN-Rail
Zone Monitor

Marine DIN-Rail Output Unit

The Marine DIN-Rail Output Unit provides a voltage-free single pole, changeover relay output.

• Capable of switching up to 30V at 1A

55000-771MAR
Marine DIN-Rail Output Unit

Marine DIN-Rail Input/Output Unit

The Marine DIN-Rail Input/Output Unit provides a voltage-free, single pole, changeover relay output, a single, monitored switch input and an unmonitored, non-polarised opto-coupled input.

• It can report fault, switch open and switch closed levels
• Three visible LEDs
• Capable of switching up to 8A at 250V AC
• Fits a standard 35mm DIN-Rail

55000-774MAR
Marine DIN-Rail Input/
Output Unit

Marine Mini Switch Monitor

The Marine Mini Switch Monitor is an interface within an entirely new housing. Designed in response to customer feedback, the smaller Mini Switch Monitor can be fitted onto a 35mm DIN-Rail with a twist-click motion or mounted in an enclosure such as a manual call point. It is designed to monitor the state of one or more single pole, volt-free contacts connected to a single pair of cables and to report the status to Apollo compatible control equipment.

• Designed for use where space is limited
• Isolated as standard
• Interrupt/non interrupt in one unit
• 'Pre-alarm' status available
• Three coloured LEDs giving clear status indication

55000-775MAR
Marine Mini Switch Monitor

Please check the Apollo website on a regular basis for up-to-date approvals information.

Marine Intelligent Base Mounted UV Flame Detector

Marine Intelligent Base Mounted UV Dual IR Flame Detector

Marine Intelligent Base Mounted IR³ Flame Detector

Base Mounted Flame Detector Bracket

The Marine Intelligent Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

- Responds to stationary flames with no flicker
- Sensitive to UV radiation emitted by flames during combustion
- Compact flame detector which fits into a Discovery Marine Base
- Loop-powered

55000-027MAR
Marine Intelligent Base Mounted UV Flame Detector

The Marine Intelligent Base Mounted UV Dual IR Flame Detector is designed to protect open indoor areas where open flaming fires may be expected. The detector has UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

- Sensitive to UV and low-frequency flickering IR radiation emitted by flames during combustion
- Compact flame detector which fits into Discovery Marine mounting bases
- Loop-powered
- False alarms due to electrical discharges from lightning or arc welding and flickering sunlight are minimised

55000-028MAR
Marine Intelligent Base Mounted UV Dual IR Flame Detector

The Marine Intelligent Base Mounted IR³ Flame Detector is designed to protect all indoor areas, even in dirty or smoky conditions, where open flaming fires may be expected. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

- Sensitive to low-frequency flickering IR radiation emitted by flames during combustion
- Compact flame detector which fits into Discovery Marine mounting bases
- Loop-powered
- False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques

55000-029MAR
Marine Intelligent Base Mounted IR³ Flame Detector

The Base Mounted Flame Detector Bracket combines a bracket and Deckhead Mounting Box (45681-217).

29600-458
Base Mounted Flame Detector Bracket (base shown not included)

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orbis

Orbis Marine conventional fire detectors offer a wealth of features to save time, enhance reliability and reduce false alarms within the marine environment. These include drift compensation and DirtAlert®, a feature that warns Service Engineers via a flashing yellow LED that detectors need maintenance; and patented FasTest®, a procedure that takes just four seconds to test smoke detectors and confirm that they are functioning correctly.

Key features of Orbis Marine include:

• Approved for use in marine environments
• Modern, low-profile design
• TimeSaver® Base for fast installation
• Transient rejection for false alarm reduction
• High humidity tolerance at up to 98% RH
• Wide operating temperature -40°C to +70°C

Germanischer Lloyd   mca Maritime and Coastguard Agency   CCS CHINA CLASSIFICATION SOCIETY 中 国 船 级 社   ABS TYPE APPROVED PRODUCT   BUREAU VERITAS 1828 B U R E A U V E R I T A S   Lloyd's Register TYPE APPROVED   DNV
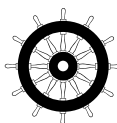
Find out more about the Orbis Marine range at www.apollo-fire.co.uk/orbismarine

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WORLD CLASS FIRE SOLUTIONS

Orbis Marine Optical Smoke Detector

Orbis Marine Multisensor Detector

Orbis Marine Heat Detector

The Orbis Marine Optical Smoke Detector operates on the well established light scatter principle. However, the sensing technology is radically different in design from previous optical detectors and significantly reduces false alarms.

- Responds well to slow-burning, smouldering fires
- Performs well in detecting black and white smoke
- Extra confirmation of smoke before alarm signal is given
- Reduced incidents of false alarms
- Sensing chamber keeps out dust and other airborne contaminants
- Operates over a broad range of voltages at extremes of temperature
- Flashing LED option

ORB-OP-42001-MAR
Orbis Marine Optical Smoke Detector

ORB-OP-42003-MAR
Orbis Marine Optical Smoke Detector with flashing LED

The Orbis Marine Multisensor Detector benefits from the same false alarm reduction technology as the optical detector, with the addition of a heat sensing element.

- Responds well to fast-burning, flaming fires
- Reduced false alarms
- Increased reliability of detection
- Sensing chamber keeps out dust and other airborne contaminants
- Operates over a broad range of voltages at extremes of temperature
- Flashing LED option

ORB-OH-43001-MAR
Orbis Marine Multisensor Smoke Detector

ORB-OH-43003-MAR
Orbis Marine Multisensor Smoke Detector with flashing LED

The Orbis Marine Heat Detector uses a single thermistor to sense the air temperature around the detector. There are twelve heat detectors in the Orbis Marine range designed to suit a wide variety of operating conditions.

- Can be used for applications where smoke detectors are unsuitable
- Ideal for environments that are dirty or smoky under normal conditions
- Flashing LED option

ORB-HT-41001-MAR A1R standard

ORB-HT-41013-MAR A1R with flashing LED

ORB-HT-41002-MAR A2S standard

ORB-HT-41014-MAR A2S with flashing LED

ORB-HT-41003-MAR BR standard

ORB-HT-41015-MAR BR with flashing LED

ORB-HT-41004-MAR BS standard

ORB-HT-41016-MAR BS with flashing LED

ORB-HT-41005-MAR CR standard

ORB-HT-41017-MAR CR with flashing LED

ORB-HT-41006-MAR CS standard

ORB-HT-41018-MAR CS with flashing LED

Please check the Apollo website on a regular basis for up-to-date approvals information.

Orbis Marine TimeSaver® Base

The Orbis Marine TimeSaver Base is a completely new design that provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure.

• Grouped terminals to make wiring easy
• Multiple fixing centres
• LED alignment mark
• Cable stripping guide
• Continuity link for voltage testing of zone wiring prior to commissioning
• Detector locking mechanism

ORB-MB-00001-MAR
Orbis Marine TimeSaver Base

Orbis Marine Relay Base

The Orbis Marine Relay Base incorporates a single-pole voltage-free changeover contact for switching ancillary equipment. When the detector changes to the alarm state, the relay is energised, causing the contact to change state. The contact will remain in this condition until the detector is reset.

• Grouped terminals to make wiring easy
• Multiple fixing centres
• LED alignment mark
• Cable stripping guide
• Continuity link for voltage testing of zone wiring prior to commissioning
• Detector locking mechanism

ORB-RB-40004-MAR
Orbis Marine Relay Base

Marine Series 65 Base Mounted UV Flame Detector

The Marine Series 65 Base Mounted UV Flame Detector is designed to protect enclosed indoor areas where open flaming fires may be expected. The detector has a fast acting response to flames up to 25m away and is equipped with a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

• Responds to stationary flames with no flicker
• Sensitive to UV radiation emitted by flames during combustion
• Zone-powered

55000-026MAR
Marine Series 65 Base Mounted UV Flame Detector

45681-200MAR
Marine Mounting Base for Base Mounted Flame Detector

Conventional Marine Manual Call Point

The Conventional Marine Manual Call Point has been designed to operate on conventional marine fire detection systems. It is compliant with EN54-11 and Marine Equipment Directive 96/98/EC and is available in both indoor and outdoor variants.

• Red LED indicator
• 'Plug and Play' terminal connections for fast wiring
• Resettable element

55100-021MAR
Conventional Marine Manual Call Point

55100-022MAR
Conventional Marine Waterproof Manual Call Point

MARINE

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WORLD CLASS FIRE SOLUTIONS

Electronic Solenoid Bell 24V DC Red

6" Motorised Bell (24V DC Red, Centrifugal)

Marine Deep Base Visual Indicator

Marine Solista Maxi

A unique, patented alarm bell designed for use in fire, security and other signalling systems. The combination of a miniature solenoid with an integrated control circuit allows excellent sound coverage, minimum current consumption and increased reliability. The improved aesthetics make the bell suitable for all applications including the most prestigious locations.

- • 155mm (6")
- • High sound output
- • Low current consumption
- • Simple installation

29600-534
Electronic Solenoid Bell 24V DC Red

29600-535
Electronic Solenoid Bell 24V DC Red (weatherproof)

All CF bells incorporate highly efficient rotary centrifugal movements combining high sound output with low current consumption.

- • High sound output
- • Low current consumption
- • Simple installation

29600-536
6" Motorised Bell (24V DC Red, Centrifugal)

This Marine Deep Base Visual Indicator offers a wide operating voltage, increased efficiency and automatic synchronisation making it a universal solution for all types of alarm and monitoring system.

- • Wide operating voltage from 9 - 60V DC
- • Current surge suppression
- • Automatic synchronisation
- • High efficiency
- • Suitable for outdoor use

29600-537
Marine Deep Base Visual Indicator (10CD)

29600-538
Marine Deep Base Visual Indicator with flashing LED (15CD)

The Marine Solista Maxi is a high output LED Visual Indicator which allows the user the choice between economy and performance. In the economy modes the Marine Solista Maxi performs extremely efficiently requiring as little as 3mA, but it can be switched to attain much higher light outputs where visibility is the prime objective. For even greater effectiveness a double flash sequence can be selected.

- • Wide operating voltage range
- • Synchronised flashing
- • High efficiency and reliability
- • Locking bases

29600-539
Marine Solista Maxi (shallow base)

29600-540
Marine Solista Maxi (deep base)

Please check the Apollo website on a regular basis for up-to-date approvals information.

Marine Asserta Sounder

Marine RoLP Sounder

Marine Asserta Sounder Visual Indicator

Marine Flashni Sounder Visual Indicator

The Marine Asserta warning sounder designed to cope with harsh environments requiring protection to IP66. Design features are incorporated to ensure safer and easier installation, while providing flexibility with fewer product variants.

- 110dB(A) or 120dB(A) output version available
- IP66 protection
- Simple first and second fix installation
- 42 alarm tones
- Three stage alarm
- Sounder time out – user adjustable
- Optional swivel mount bracket

29600-541
Marine Asserta Sounder (110dB)

29600-543
Marine Asserta Sounder (120dB)

The Marine Roshni Low Profile (RoLP) is the fire market's leading conventional sounder, although it finds uses in much wider applications such as security, general signalling and process alarms. The wide operating voltage and range of tones available to the user make this flexible sounder supremely adaptable in even its most basic forms.

- High sound output
- Low current consumption
- 32 tones (user selectable)
- Automatic synchronisation
- Volume control
- Second tone for two stage alarms
- Lockable base
- Suitable for outdoor use

29600-622
Marine RoLP Sounder (shallow base)

29600-623
Marine RoLP Sounder (deep base)

The Marine Asserta Sounder Visual Indicator is designed to cope with harsh environments requiring protection to IP66. Design features are incorporated to ensure safer and easier installation, while providing flexibility with fewer product variants.

- 24VDC or 230VAC operation
- 110dB(A) or 120dB(A) output version available
- IP66 protection
- Fully integrated asymmetric visual indicator uses light more efficiently
- Simple first and second fix installation
- 42 alarm tones
- Three stage alarm
- Sounder time out – user adjustable

29600-542
Marine Asserta Sounder Visual Indicator (110dB)

29600-544
Marine Asserta Sounder Visual Indicator (120dB)

The Marine Flashni is an audible and visual device which requires one single installation point. This greatly reduces installation and costs and is much less obtrusive than two separate devices. Versions are available with the sounder and visual indicator linked, or with separate terminals for independent operation.

- High output sounder visual indicator
- Automatic sounder synchronisation
- Volume control
- Choice of lens/sounder colour combinations
- Base compatible with RoLP visual indicator
- Lockable base

Marine Flashni Sounder/ Visual Indicator (red body)

Shallow base:

29600-624 Red lens

29600-625 Clear lens

Deep base:

29600-626 Clear lens

29600-627 Red lens

MARINE

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SIL2

Apollo Fire Detectors are pleased to announce that they have a range of devices independently evaluated and certified to SIL2 (Safety Integrity Level) with respect to their primary function (Detection, Manual Call Point, Audio, Visual etc) under IEC61508 Functional Safety of Electrical/ Electronic/ Programmable Electronic Safety-related Systems.

CE
0832   0729

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Discovery Sounder Visual Indicator Base

The Discovery Sounder Visual Indicator Base makes full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

• It is possible to set individual control of the sounder and visual indicator
• Volume and tone settings can be selected from the control panel
• Tones can be used for other purposes in addition to warning of fire, ideal for schools
• Enables soft start option, ideal for hospitals and nursing homes
• Electronic bell tone

45681-393SIL
Discovery Sounder
Visual Indicator Base

Discovery Heat Detector

The Discovery Heat Detector uses a single thermistor to sense the air temperature around the detector.

• Ideal in environments that are dirty or smoky under normal conditions
• Well suited for warehouses, loading bays and car parks
• Unaffected by wind or atmospheric pressure
• Five response modes
• Remote test feature

58000-400SIL Discovery Heat Detector

Discovery Ionisation Smoke Detector

The Discovery Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

• Responds well to fast-burning, flaming fires
• Designed to operate in a variety of environments
• Resilient to dust
• Five response modes
• Remote test feature

58000-500SIL
Discovery Ionisation Smoke Detector

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Discovery Optical Smoke Detector

The Discovery Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature

58000-600SIL
Discovery Optical Smoke Detector

Discovery Multisensor Detector

The Discovery Multisensor Detector comprises optical smoke and thermistor temperature sensors which give both a combined signal as well as a separate heat signal for improved false alarm management.

- Ideal for a wide range of applications
- Enhanced false alarm management
- Recommended, in specific modes, for hotel bedrooms and hospital wards
- Unaffected by wind or atmospheric pressure
- Well suited for sensitive environments
- Five response modes
- Heat only and optical only options
- Remote test feature

58000-700SIL
Discovery Multisensor Detector

Waterproof Manual Call Point

The Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur. A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

- IP67 rated
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

58100-950SIL
Waterproof Manual Call Point

58100-951SIL
Waterproof Manual Call Point with Isolator

58100-953SIL
Waterproof Manual Call Point with Isolator (yellow) †

Please check the Apollo website on a regular basis for up-to-date approvals information.

Discovery Manual Call Point (Non-Standard)

Apollo offers a selection of differently coloured call points suitable for a variety of applications such as initiating a "hazard" rather than a fire alarm. They can be used on XP95 and Discovery systems.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an activation in under 0.2 seconds
- Resettable element

Discovery Manual Call Point (non-standard):

58100-926SIL White (surface) †

58100-927SIL Yellow (surface) †

58100-928SIL Blue (surface) †

58100-929SIL Green (surface) †

58100-930SIL Orange (surface) †

XP95 IS Heat Detector

The XP95 IS Heat Detector operates by measuring heat levels with a single thermistor which gives a count output proportional to the external air temperature.

- Ideal for environments that are dirty or smoky under normal conditions
- Unaffected by wind or atmospheric pressure

55000-440SIL XP95 IS Heat Detector

XP95 IS Ionisation Smoke Detector

The XP95 IS Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Minimal effects from temperature, humidity, atmospheric pressure

55000-540SIL
XP95 IS Ionisation Smoke Detector

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XP95 IS
Optical Smoke
Detector

The XP95 IS Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

• Responds well to slow-burning, smouldering fires
• Well suited for escape routes
• Unaffected by wind or atmospheric pressure

55000-640SIL
XP95 IS Optical Smoke Detector

XP95 IS
Manual
Call Point

The XP95 IS Manual Call Point is based on the standard waterproof model, page 107. It features an 'interrupt' facility to provide fast response to an alarm.

• Reports an alarm in under 0.2 seconds
• Waterproof
• IP67 rated

55100-940SIL
XP95 IS Manual Call Point (red)

55100-942SIL
XP95 IS Manual Call Point (yellow)*

55100-944SIL
XP95 IS Manual Call Point (blue)*

Input/Output
Unit

The Input/Output Unit provides a voltage-free, double pole changeover (DPCO) relay output, a single monitored switch input and an unmonitored, non-polarised opto-coupled input.

• It can report fault, switch open and switch closed levels
• Three visible LEDs
• Loop-powered
• Capable of switching up to 30V at 1A

55000-847SIL Input/Output Unit

Please check the Apollo website on a regular basis for up-to-date approvals information.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

Output Unit

XP95 Manual Call Point

The Output Unit provides a voltage-free single pole, changeover relay output. It is a simplified version of the Input/Output Unit without circuitry for monitoring inputs.

- Capable of switching up to 30V at 1A

55000-849SIL Output Unit

The address of each call point is set at the commissioning stage by means of a seven-segment DIL switch. The device features 'Plug and Play' terminal connections and a resettable element.

- 'Plug and Play' terminal connections for fast wiring
- Allow wiring continuity testing before fitting
- Reports an alarm in under 0.2 seconds
- Resettable element

55100-905SIL
XP95 Manual Call Point (surface)

55100-908SIL
XP95 Manual Call Point with Isolator (surface)

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Intrinsically Safe

Apollo offer both analogue addressable and conventional smoke and heat detector ranges designed to be intrinsically safe, as they meet the requirements of the ATEX directive.

Apollo's Intrinsically Safe equipment is incapable of causing ignition in normal conditions, with a single fault or with a combination of any two faults.

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

XP95 ®   orbis ™

There are many places where an explosive mixture of air and gas or vapour may be present continuously, intermittently or as a result of an accident. These are defined as hazardous areas by BS EN 60079, the code of practice for installation and maintenance of electrical apparatus in potentially explosive atmospheres.

Hazardous areas are common in petroleum and chemical engineering plants and in factories processing and storing gases, solvents, paints and other volatile substances.

Electrical equipment for use in these areas needs to be designed so that it cannot ignite an explosive mixture, not only in normal operation but also in fault conditions. There are a number of methods available to achieve this but one of the most common is intrinsic safety.

Apollo's IS ranges comply with MED 94/9/EC.

Engineering plants

Hazardous areas and potentially explosive atmospheres within these environments require electrical equipment that cannot ignite an explosive mixture, achieveable by using intrinsic safety.

Factory environments

Factories where the processing or storing of gases, solvents, paints and other volatile substances, and are defined as hazardous areas are required to follow the BS EN 60079 code of practice. Apollo Intrinsically Safe ranges fulfil these requirements.

INTRINSICALLY SAFE

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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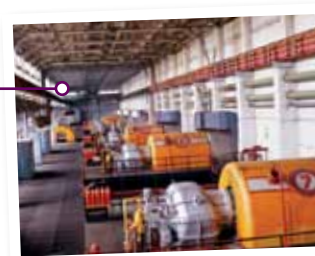
XP95®

XP95 Intrinsically Safe (IS) detectors are a development of the well established analogue addressable XP95 range from Apollo. XP95 IS detectors feature all the benefits of the standard range, but are developed specifically for use in hazardous areas. The addresses of XP95 IS detectors are set by means of the patented XPERT card. See page 37 for more details.

LPCB   Ex   CE 0832 1180

Find out more about the XP95 IS range at www.apollo-fire.co.uk/xp95is

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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XP95 IS Optical Smoke Detector

The XP95 IS Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Well suited for escape routes
- Unaffected by wind or atmospheric pressure

55000-640
XP95 IS Optical Smoke Detector

XP95 IS Ionisation Smoke Detector

The XP95 IS Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Minimal effects from temperature, humidity, atmospheric pressure

55000-540
XP95 IS Ionisation Smoke Detector

XP95 IS Heat Detector

The XP95 IS Heat Detector operates by measuring heat levels with a single thermistor which gives a count output proportional to the external air temperature.

- Ideal for environments that are dirty or smoky under normal conditions
- Unaffected by wind or atmospheric pressure

55000-440 XP95 IS Heat Detector

Please check the Apollo website on a regular basis for up-to-date approvals information.

XP95 IS Mounting Base

The XP95 IS Mounting Base has been designed to accept only IS products. This ensures that standard detectors cannot inadvertently be fitted into an Intrinsically Safe system. XPERT cards are supplied with all bases.

- XPERT addressing
- One way fit
- Only accepts IS detectors

| 45681-215 XP95 IS Mounting Base |

XP95 IS Manual Call Point

The XP95 IS Manual Call Point is based on the standard waterproof model, page 107. It features an 'interrupt' facility to provide fast response to an alarm.

- Reports an alarm in under 0.2 seconds
- Waterproof
- IP67 rated

55100-940
XP95 IS Manual Call Point (red)

55100-942
XP95 IS Manual Call Point (yellow)*

55100-944
XP95 IS Manual Call Point (blue)*

XP95 IS Manual Call Point – MEDC Style

The XP95 IS Manual Call Point – MEDC Style is recommended for heavy duty applications. This model is made of glass-reinforced polyester and may be ordered as break-glass or push-button style.

- Reports address in under 0.2 seconds
- Waterproof
- Robust design

Break-glass:

55000-960 Red
55000-962 Yellow*
55000-964 Blue*
55000-966 Black/yellow stripes*

Break-glass with flap:

55000-961 Red
55000-963 Yellow*
55000-965 Blue*
55000-967 Black/yellow stripes*

Push-button:

55000-970 Red
55000-971 Yellow*
55000-972 Blue*
55000-973 Black/yellow stripes*

> **!** **For our full range of Manual Call Points see page 104.**

* Does not have LPCB or CPD approval, or comply with EN54-11.

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XP95 IS Galvanic Barrier

The XP95 IS Galvanic Barrier is installed in the safe area and ensures system integrity.

• **Enables compliance with the ATEX directive**

29600-098 XP95 IS Galvanic Barrier

DIN-Rail Interface Enclosures

DIN-Rail Interface Enclosures are available in two sizes and can be used for housing Intrinsically Safe (IS) barriers or DIN-Rail mounted interfaces. A multi-purpose label that features a section for use with IS systems is supplied. For non-IS systems, the part referring to IS can simply be removed.

• **Allows multiple interfaces to be housed together**
• **IP67 rated**

29600-239
DIN-Rail Interface Enclosure (4 units)

29600-240
DIN-Rail Interface Enclosure (10 units)

XP95 Protocol Translator

The XP95 Protocol Translator is installed in the safe area ensuring integrity of communication between control equipment and field devices and safety within the limits of BASEEFA approvals.

• **Loop-powered**
• **Translates voltage levels from a loop driver to be compatible with IS requirements**

55000-855
XP95 Protocol Translator (single channel)

55000-856
XP95 Protocol Translator (dual channel)

Please check the Apollo website on a regular basis for up-to-date approvals information.

Case Study
Keeping London's Iconic Landmarks Safe This Summer

Summary	
Project Name:	Oxo Tower Wharf
Location:	London, UK
Market:	Commercial
Products used:	Products from XPander range
Installer:	Drax
Panel:	Morley-IAS Zx series control panels

Apollo fire detectors are now playing an integral part in keeping an iconic building on London's South Bank safe. Members of the Apollo Partner Plus initiative, Drax Services, has recently been working with the Coin Street Community Builders (CSCB) to develop a design proposed by Environmental Design Associates and install a system for the Oxo Tower Wharf. The Oxo Tower has been a riverside landmark since the 1930s but entered a new lease of life in the 1990s when CSCB refurbished it into the mixed-used development it is today.

Originally owned by the Liebig Extract Of Meat Company, the company that made the famous OXO beef cube, its architect, Albert Moore, incorporated the famous OXO moniker as windows on the tower to get around the ban on skyline advertising.

The iconic building, reopened in 1996, is now home to a unique community of design boutiques and studios. In addition to co-operative housing, the building is home to exhibition spaces including the gallery@oxo and Bargehouse and cafés and bars including the famous OXO Tower Restaurant, Bar and Brasserie.

Commercial Director, Alex Cother of Drax explains "The Wharf is one of a kind in London and was expecting an increasing number of visitors during a busy summer for the city as a whole. At any one time there can be up to 500 people in the building and with its concentration of over 20 retail studios as well as specialist shops, we needed a reliable solution that could be installed with minimum disruption.

"The Oxo Tower is open all week so the ageing system it had in place was kept running as we installed the new system. The selection of products, including Apollo's open protocol devices and several Morley-IAS by Honeywell Zx control panels, has allowed us to meet the client's specification and to install a ConnecT graphical user interface which will not only announce alarms and produce history reports, but will also improve the administration of the maintenance."

Project Manager, Michael Kalispera adds, "As installers we want to ensure our clients can continue to operate as easily as possible whilst we are carrying out our work. Our main concern on this project was minimising disruption. Installation of hard-wired equipment, by its very nature, can be a messy, noisy business and with shop units occupied by high-end galleries, hairdressers, designers and applied artists we wanted to work quickly, quietly and cleanly so customers could shop in peace and businesses could continue to run smoothly.

"The obvious solution for us was Apollo's wireless XPander Range. Although XPander equipment is more expensive than its traditional wired counterparts, this was offset by reduced installation costs. As we didn't require cables in certain areas we could cut our time on-site and, as a result, there were fewer interruptions to staff and customer as well as less mess and noise.

"We received valuable support from Apollo during the installation and the technical team visited us at the Tower on a number of occasions. They were able to understand the needs of the project first hand and advise us on the type and quantity of equipment required, carry out signal strength testing of the radio equipment and assess its suitability to the fire alarm infrastructure.

"In this unique environment we would have struggled to find a solution without Apollo's XPander range - the help and support the team provided us with throughout the project was critical to its success."

XPANDER®

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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orbis ™

Orbis IS is a range of conventional detectors which have been developed from the standard Orbis smoke and heat detectors. Orbis IS is a range with modern styling and is electronically compatible with Apollo Series 60 Intrinsically Safe conventional detectors. Orbis IS is a demonstration of Apollo's commitment to the market for high quality conventional detectors for use in small to medium size installations. In developing this range, Apollo has put ease of installation and reliability in daily operation at the forefront of considerations.

Key features of Orbis IS include:

• TimeSaver® Base

• Patented FasTest® enabling functional testing in four seconds

• DirtAlert® indicates limit of drift compensation

• Tolerates extreme operating conditions: -40°C to +70°C

• False alarm reduction

• Flashing LED option

LPCB   Ex   CE   VdS
0832
1180

Find out more about the Orbis range at www.apollo-fire.co.uk/orbisis

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Orbis IS Optical Smoke Detector

Orbis IS Multisensor Smoke Detector

Orbis IS Heat Detector

The Orbis IS Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

• Reduces false alarms
• Recommended for early warning of fire in most areas
• Improved sensitivity to black smoke
• Compensation for slow changes in sensitivity
• Algorithms for reliability of alarm

The Orbis IS Multisensor Smoke Detector benefits from the same false alarm technology as the Optical Smoke Detector with the addition of a heat sensing element.

• Reduces false alarms
• Sensitive to fast burning, flaming fires
• Improved sensitivity to black smoke
• Compensation for slow changes in sensitivity
• Algorithms for reliability of alarm

The Orbis IS Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature.

• Can be used for applications where smoke detectors are unsuitable
• Ideal for environments that are dirty or smoky under normal conditions
• Reduced incidences of false alarms
• Increased reliability of detection

ORB-OP-52027-APO
Orbis IS Optical Smoke Detector

ORB-OP-52028-APO
Orbis IS Optical Smoke Detector with flashing LED

ORB-OH-53027-APO
Orbis IS Multisensor Detector

ORB-OH-53028-APO
Orbis IS Multisensor Detector with flashing LED

Standard:
ORB-HT-51145-APO A1R
ORB HT 51157 APO A1S
ORB-HT-51147-APO A2S
ORB-HT-51149-APO BR
ORB-HT-51151-APO BS
ORB-HT-51153-APO CR
ORB-HT-51155-APO CS

With flashing LED:
ORB-HT-51146-APO A1R
ORB HT 51158 APO A1S
ORB-HT-51148-APO A2S
ORB-HT-51150-APO BR
ORB-HT-51152-APO BS
ORB-HT-51154-APO CR
ORB-HT-51156-APO CS

Please check the Apollo website on a regular basis for up-to-date approvals information.

Orbis IS TimeSaver® Base

The Orbis IS TimeSaver® Base provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure.

- Grouped terminals to make wiring easy
- Two fixing centres
- LED alignment mark
- Detector locking mechanism

ORB-MB-50018-APO
Orbis IS Timesaver® Base

Orbis IS Adaptor

The Orbis IS Adaptor enables Orbis IS detector heads to be fitted into existing Series 60 IS bases in order to upgrade systems with minimal disruption.

- Eliminates the need for re-wiring

ORB-BA-50008-APO
Orbis IS Adaptor

Conventional Galvanic Barrier

The Conventional Galvanic Barrier is installed in the safe area and ensures system integrity.

- Enables compliance with the ATEX directive

29600-378
Conventional Galvanic Barrier

INTRINSICALLY SAFE

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DIN-Rail Interface Enclosures

Conventional IS Manual Call Point

DIN-Rail Interface Enclosures are available in two sizes and can be used for housing Intrinsically Safe (IS) barriers or DIN-Rail mounted interfaces. A multi-purpose label that features a section for use with IS systems is supplied. For non-IS systems, the part referring to IS can simply be removed.

- Allows multiple interfaces to be housed together
- IP67 rated

29600-239
DIN-Rail Interface Enclosure (4 units)

29600-240
DIN-Rail Interface Enclosure (10 units)

The Conventional IS Manual Call Point has been designed to operate on conventional Intrinsically Safe fire detection systems. Designed specifically for use in atmospheres in which explosive mixtures are or may be present, certain design considerations must be observed.

- 'Plug and Play' terminal connections for fast wiring
- Resettable element

55100-031
Conventional IS Manual Call Point

55100-032
Conventional IS Manual Call Point (non-standard) yellow

55100-033
Conventional IS Waterproof Manual Call Point

55100-034
Conventional IS Waterproof Manual Call Point (non-standard) yellow

Please check the Apollo website on a regular basis for up-to-date approvals information.

UL/ULC/FM

Apollo's product offering includes the detectors & other devices developed and approved for the UL/ULC/FM markets. Apollo has carefully researched and developed the ranges to ensure that they meet not only UL and other standards but also the demands of today's high technology environments.

Key features of Discovery UL include:

- XPERT Card addressing
- Resists steam and cigarette smoke
- Flashing LED option
- Five response modes for adaptability to changing environments
- Drift compensation to ensure constant sensitivity
- Capable of recording site specific data in the detector
- Alarm flags for fast alarm reporting
- Conventional alarm facility during control panel processor fault
- 360° visibility alarm indication
- Compatible with XP95A systems

Advanced features for notification devices:

- Global and group addressing
- 15 tone pairs
- Volume selection
- Synchronisation of all loop-powered notification devices

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412

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DISCOVERY®

Discovery UL is a line of high-specification, intelligent fire detectors developed to meet the requirements of sophisticated systems while providing engineers with an additional dimension in fire protection capability. Discovery UL has a 'distributed intelligence' system where decisions are made in the detector head as well as at the control panel. Drift compensation is also incorporated into the detector, allowing it to adapt to dirty or dusty environments, which reduces false alarms.

Each detector in the Discovery UL range can operate in one of five response modes, which can be selected from the control panel. The response characteristics have been carefully established so that the detectors comply with the requirements of UL in all response modes. Mode One will give a higher sensitivity to fire than Mode Five. Discovery UL gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms are vital.

CSFM | SIGNALING UL LISTED | ULC LISTED | FM | NYC BUILDINGS

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Discovery UL Photoelectric Smoke Detector

The Discovery UL Photoelectric Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smoldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-650
Discovery UL Photoelectric Smoke Detector

Discovery UL Multisensor Detector

The Discovery UL Multisensor Detector consists of photoelectric smoke and thermistor temperature sensors whose outputs are combined to give the final analogue value. As a result, the multisensor is useful over a wide range of applications and is highly immune to false alarms.

- Ideal for wide range of applications
- Highly immune to false alarms
- Well suited for sensitive environments
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-750
Discovery UL Multisensor Detector

Discovery UL Ionisation Smoke Detector

The Discovery UL Ionisation Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Remote test feature

58000-550
Discovery UL Ionisation Smoke Detector

Discovery UL Heat Detector

The Discovery UL Heat Detector is distinguishable by the low airflow resistant case and uses a single thermistor to sense the air temperature around the detector.

- Ideal for environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading docks and parking garages
- Unaffected by wind or atmospheric pressure
- Remote test feature

58000-450
Discovery UL Heat Detector

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⋯XP95A

The XP95A range of analogue addressable fire detectors is advanced in design and performance and offers unique features that benefit both the installer and the end user.

The range is based on Apollo's XP95 range. XP95A has a 'central intelligence' system where all the decisions are made by the control panel. Each detector is addressed using Apollo's patented XPERT card, supplied with the mounting bases. The XP95A range includes an Ionisation Detector, a Photoelectric Detector, a Heat Detector, a Multisensor, an Isolator and a series of Modules.

Key features of XP95A include:

- XPERT card addressing
- Analogue value report
- Alarm flags for fast alarm response
- Synchronisation of all loop-powered notification devices
- Advanced error check

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Please check the Apollo website on a regular basis for up-to-date approvals information.

XP95A Photoelectric Smoke Detector

The XP95A Photoelectric Smoke Detector works on the light-scatter principle and is ideal for applications where slow-burning or smoldering fires are likely.

• Responds well to slow-burning, smouldering fires
• Well suited for bedrooms and escape routes
• Unaffected by atmospheric pressure

55000-650
XP95A Photoelectric Smoke Detector

XP95A Multisensor

The XP95A Multisensor contains a photoelectric smoke sensor and a thermistor (temperature sensor) whose outputs are combined to give the final analogue value.

• Sensitive to a wide range of fires
• Well suited for environments such as hotel bedrooms, warehouses and loading docks
• Unaffected by wind or atmospheric pressure

55000-886
XP95A Multisensor

XP95A Ionisation Smoke Detector

The XP95A Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

• Responds well to fast-burning, flaming fires
• Designed to operate in a variety of environments
• Minimal effects from temperature, humidity, atmospheric pressure

55000-550
XP95A Ionisation Smoke Detector †

55000-555
XP95A Ionisation Smoke Detector (ULC)

XP95A Heat Detector

The XP95A Heat Detector monitors temperature by using a single thermistor which provides a voltage output proportional to the external air temperature. It is classified as an ordinary detector by UL.

• Ideal for environments that are dirty or smoky under normal conditions
• Well suited for warehouses, loading docks and parking garages
• Unaffected by wind or atmospheric pressure

55000-450
XP95A Heat Detector

† Does not have ULC approval

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SL-DAA 2-Wire Analogue Addressable Duct Smoke Detector

SL-DA4R 4-Wire Analogue Addressable Duct Smoke Detector

NEW

NEW

Offering compatibility with fire alarm systems utilising Apollo XP95 and/or Discovery protocol, the SL-DAA Series Duct Smoke Detector is a two-wire analogue addressable device used for early detection of smoke and products of combustion present in air moving through HVAC ducts in commercial, industrial, and residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down via the building's fire alarm control panel (FACP) in the event of smoke detection. Output terminals are provided for a remote alarm indicator accessory.

Offering compatibility with fire alarm systems utilising Apollo XP95 and/or Discovery protocol, the SL-DA4R Series Duct Smoke Detector is a four-wire analogue addressable device used for early detection of smoke and products of combustion present in air moving through HVAC ducts in commercial, industrial, and residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down via the building's fire alarm control panel (FACP) in the event of smoke detection. One set of 15A form "C" alarm contacts are provided for a wide range of remote accessories such as horns, strobes, remote status indicators and test key switches or push-buttons.

- 2-Wire addressable detector with relay output
- XP95A sensor
- Wide operating voltage

- 4-Wire addressable detector with relay output
- XP95A sensor
- Wide operating voltage

SL-DAA-N Ionisation

SL-DAA-P Photoelectric

SL-DA4R-N Ionisation

SL-DA4R-P Photoelectric

Please check the Apollo website on a regular basis for up-to-date approvals information.

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*series*65A
9-33V

Series 65A is a range of conventional fire detectors available
in three versions:
• Standard
• Flashing LED
• Flashing LED and magnet operated test switch

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Series 65A Photoelectric Smoke Detector

The Series 65A Photoelectric Smoke Detector incorporates a pulsing LED located within the housing of the detector. The detector housing is identical to that of the Ionisation Detector but has an indicator LED which is clear in quiescent state but produces red light in alarm.

• Responds well to slow-burning, smouldering fires
• Well suited for bedrooms and escape routes
• Unaffected by wind or atmospheric pressure
• Wide operating voltage
• Flashing LED option
• Flashing LED and magnet operated test switch option

55000-327
Series 65A Photoelectric Smoke Detector standard

55000-326
Series 65A Photoelectric Smoke Detector with flashing LED

55000-325
Series 65A Photoelectric Smoke Detector with flashing LED and magnetic test switch

55000-328
Series 65A Photoelectric Smoke Detector – high sensitivity

Series 65A Ionisation Smoke Detector

The Series 65A Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chamber causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

• Responds well to fast-burning, flaming fires
• Designed to operate in a variety of environments
• Wide operating voltage
• Flashing LED option
• Flashing LED and magnet operated test switch option

55000-227
Series 65A Ionisation Smoke Detector standard

55000-226
Series 65A Ionisation Smoke Detector with flashing LED

55000-225
Series 65A Ionisation Smoke Detector with flashing LED and magnetic test switch

Series 65A Heat Detector

The Series 65A Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature. There are nine heat detectors in the Series 65A range designed to suit a wide variety of operating conditions.

• Can be used for applications where smoke detectors are unsuitable
• Ideal environments that are dirty or smoky under normal conditions
• Wide operating voltage
• Flashing LED option
• Flashing LED and magnet operated test switch option

55000-140 135°F standard

55000-139 135°F with flashing LED

55000-138 135°F with flashing LED and magnetic test switch

55000-143 170°F standard

55000-142 170°F with flashing LED

55000-141 170°F with flashing LED and magnetic test switch

55000-146 200°F standard

55000-145 200°F with flashing LED

55000-144 200°F with flashing LED and magnetic test switch

Please check the Apollo website on a regular basis for up-to-date approvals information.

SL-2000 Conventional Duct Smoke Detector

SL-D2W Conventional Duct Smoke Detector

RT-3000 Weatherproof Duct Smoke Detector

HS-100 Special Application Duct Smoke Detector

NEW

The SL-2000 is a four-wire conventional duct smoke detector includes many features that represent true innovations from current generation duct smoke detectors. The SL-2000 is designed and built to meet the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a wide range of remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push-buttons.

• 4-Wire conventional detector
• No-tools features
• Wide operating voltage

> **SL-2000-N** Ionisation
>
> **SL-2000-P** Photoelectric

NEW

The SL-D2W Duct Smoke Detector is a two-wire conventional unit used for early detection of smoke and products of combustion present in air moving through HVAC ducts in commercial, industrial, and residential applications. Designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers, complete systems may be shut down via the building's fire alarm control panel (FACP) in the event of smoke detection. Output terminals are provided for a remote alarm indicator.

• 2-Wire conventional detector with relay output
• Series 65A sensor
• Operating voltage: 9-33VDC

> **SL-D2W-N** Ionisation
>
> **SL-D2W-P** Photoelectric

NEW

The RT-3000 Weatherproof Duct Smoke Detector is a weather tight NEMA 4X rated corrosion resistant enclosure. Coupled with the extended temperature listings allow for installation of this conventional duct smoke detector in the widest possible range of indoor/outdoor environments. The truly innovative built-in features save time and money during install, testing and maintenance cycles, significantly reducing the total cost of ownership versus other comparable products.

• NEMA 4X rating for use in harsh, corrosive environment
• Stainless steel cover latch for easy access, built-in tether keeps cover close at hand
• Segregated, trade-dedicated terminal blocks
• Operates at temperatures -4°F to 158°F (-20°C to 70°C)

> **RT-3000-N** Ionisation
>
> **RT-3000-P** Photoelectric

NEW

The HS-100 is designed specifically for applications where our standard external mount duct detectors cannot be utilized. Application examples include HVAC plenum return systems in commercial rooftop package units, air shafts, between-ceiling plenum spaces, dampers and applications requiring extremely low or no air velocity (≤ 100 ft/min). This detector is not intended for open area protection nor should it be used for early warning detection or replace a regular fire detection system.

• Ionisation listed for air velocity from 0 - 2,000 feet/min
• Photoelectric listed for air velocity from 0 - 3,000 feet/min
• Interconnects with SL- Series, RT-Series traditional-style duct detectors for common shutdown

> **HS-100-N** Ionisation
>
> **HS-100-P** Photoelectric

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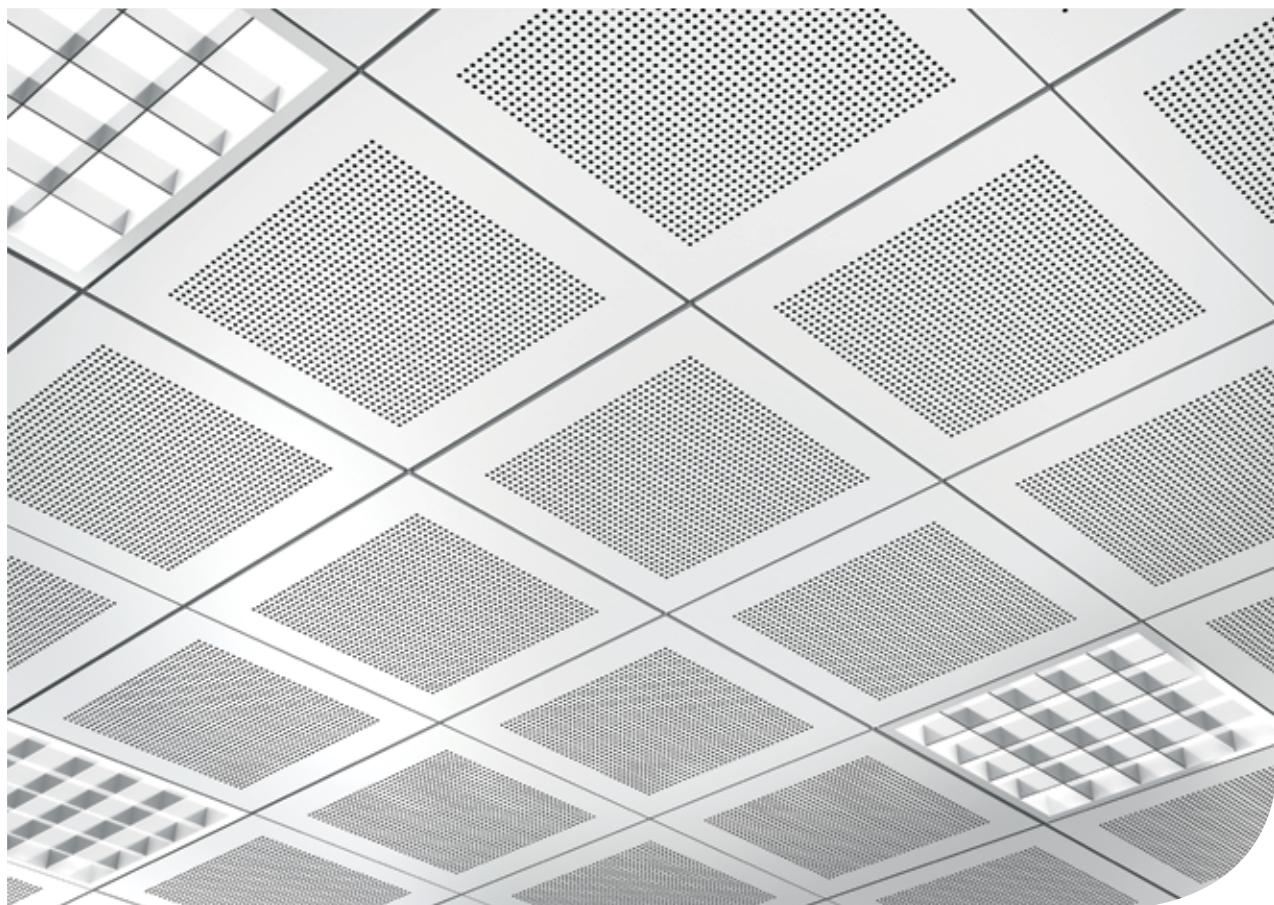
Bases

DISCOVERY®   XP95A   series 65A 9-33V

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XP95A Low Power Relay Base

XP95A Mounting Base

E-Z Fit Base

The XP95A Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

- Gives a set of voltage-free contacts controlled by the remote output of a detector
- Draws negligible current

45681-242UL
XP95A Low Power Relay Base 4"

All detectors in the XP95A product line fit the XP95A Mounting Base which is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

- XPERT addressing
- One way fit
- Locking feature to prevent unauthorised removal

45681-210UL
XP95A Mounting Base 4"

45681-225APO
XP95A Mounting Base 6"

The E-Z Fit Base is a low profile 6" mounting base for XP95A detectors.

- High degree of protection against unauthorised removal

45681-250 E-Z Fit Base

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XP95A Isolating Base

Series 65A Standard Base

Series 65A Standard Relay Base 4″

The XP95A Isolating Base senses and detects short-circuit faults on XP95A loops and spurs.

- Up to 20 devices may be installed between isolating bases
- XPERT addressing

45681-321UL XP95A Isolating Base

The Series 65A Standard Base has been designed to enable detectors to be fitted without the need of force – particularly useful when fitting to suspended ceilings. All Series 65A bases have a 'one way only' fit.

- Two-wire base
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal
- Contains no electrical parts

45681-200USA
Series 65A Standard Base 4″

45681-220USA
Series 65A Standard Base 6″

The Standard Series 65A Relay Base provides one set of volt-free, changeover (form C) contacts that change state when the detector signals an alarm.

- Four-wire base
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-255
Series 65A Standard Relay Base 4″

Please check the Apollo website on a regular basis for up-to-date approvals information.

Series 65A Auxiliary Relay Base 4″

Series 65A End-of-Line Relay Base

Series 65A Low Profile Base 6″

Series 65A E-Z Fit Base 6″

The Series 65A Auxiliary Relay Base provides two sets of volt-free changeover contacts to facilitate the switching of a remote LED or other auxiliary device.

- Four-wire base
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-256
Series 65A Auxiliary Relay Base 4″

The Series 65A End-of-Line (EOL) Relay Base is intended for use with four-wire circuits and features two sets of changeover contacts and a power supervision relay.

- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-257
Series 65A 12V End-of-Line Relay Base 4″

45681-258
Series 65A 24V End-of-Line Relay Base 4″

A low profile mounting base for Series 65A detectors.

- Adaptor bar to fit different back boxes
- Detector locking mechanism
- One way fit
- Easy to wire
- Contains a ground wire terminal

45681-232
Series 65A Low Profile Base 6″

A low profile mounting base for Series 65A detectors.

- High degree of protection against unauthorised removal

45681-251
Series 65A E-Z Fit Base 6″

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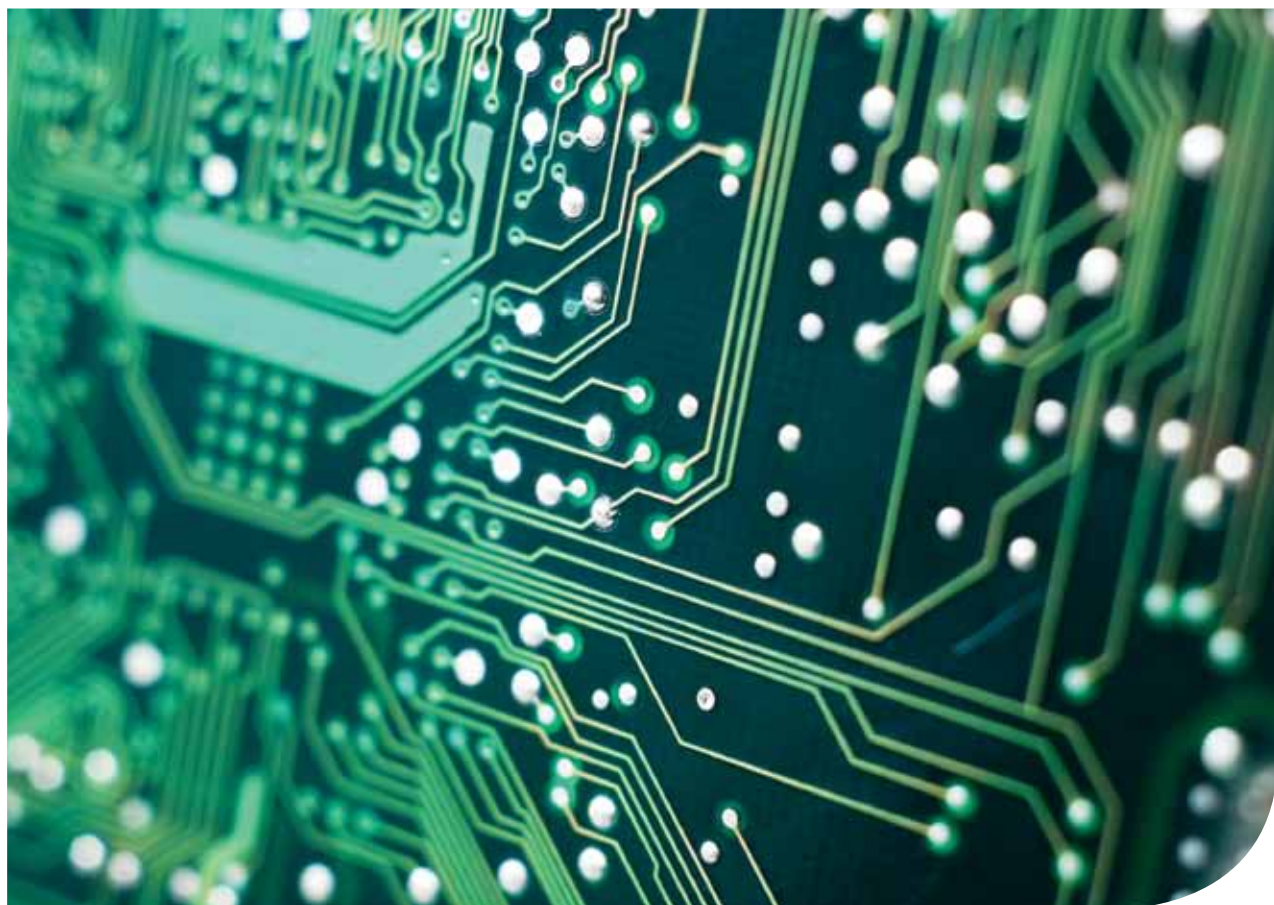
Modules

DISCOVERY®   XP95A

Please check the Apollo website on a regular basis for up-to-date approvals information.

XP95A Isolator

The XP95A Isolator is placed at intervals on the loop and ensures that, in the case of a short-circuit, only the section between the isolators will be affected. When the short-circuit is removed, the isolators automatically restore power and data to the isolated section.

• Detects wiring short-circuits using patented technology
• Minimises disruption from short-circuits
• Automatic de-isolation on short-circuit removal
• Up to 20 devices may be installed between isolators

55000-750 XP95A Isolator

Mini Monitor Module

The Mini Monitor Module is an interface within an entirely new housing. This allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, for example a Pull Station. It is designed to monitor the state of one or more single pole, voltage-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue control equipment.

• Designed for use where space is limited
• Interrupt/non interrupt in one unit
• 'Pre-alarm' status available
• Three, coloured LEDs, giving clearer status indication

55000-765 Mini Monitor Module

XP95A Mini Switch Monitor Module

The XP95A Mini Switch Monitor Module is designed to monitor the state of one or more single pole, voltage-free contacts and to report the status to Apollo compatible analogue control equipment.

• Three input states - 'normal', 'trouble', and 'alarm'
• Visible LED with remote LED connection option
• Loop-powered
• Designed to fit into equipment with limited space
• Easy to install

55000-831
XP95A Mini Switch Monitor Module

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XP95A Mini Priority Switch Monitor Module

XP95A Switch Monitor Module

XP95A Priority Switch Monitor Module

The XP95A Mini Priority Switch Monitor Module is designed to monitor the state of one or more single pole, voltage-free contacts and to report the status to Apollo compatible analogue control equipment. It can also place a signal on the loop to provide early warning if a device such as a pull station is operated.

- Three input states - 'normal', 'trouble' and 'alarm'
- Visible LED with remote LED connection option
- Loop-powered
- Designed to fit into equipment with limited space
- Easy to install
- Monitors equipment where a fast response is required
- Interrupt facility

55000-830
XP95A Mini Priority Switch Monitor Module

The XP95A Switch Monitor Module is designed to monitor the state of one or more single pole, voltage-free contacts and to report the status to Apollo compatible analogue control equipment.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED
- Loop-powered

55000-805
XP95A Switch Monitor Module

The XP95A Priority Switch Monitor Module is designed to monitor the state of one or more single pole, voltage-free contacts and to report the status to Apollo compatible analogue control equipment. It can also place a signal on the loop to provide early warning if a device such as a pull station is operated.

- Three input states - 'normal', 'trouble', and 'alarm'
- Visible LED
- Loop-powered
- Fast response time
- Interrupt facility

55000-806
XP95A Priority Switch Monitor Module

Please check the Apollo website on a regular basis for up-to-date approvals information.

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XP95A Dual Priority Switch Monitor Module

The XP95A Dual Priority Switch Monitor Module contains two priority mini switch monitor modules on a single plate.

• Loop-powered
• Fast response time
• Interrupt facility

55000-790
XP95A Dual Priority Switch Monitor Module

XP95A Switch Monitor Input/ Output Module

The XP95A Switch Monitor Input/ Output Module provides a voltage-free, single pole, changeover relay output, a single, monitored switch input and unmonitored, non-polarised opto-coupled input.

• Reports 'trouble', 'switch open' and 'switch closed' levels
• Visible LED
• Loop-powered

55000-820
XP95A Switch Monitor Input/Output Module

XP95A Sounder Control Module

The XP95A Sounder Control Module monitors and controls the operation of a zone of conventional sounders and reports their status to the control panel.

• Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
• May be synchronised when in pulsed operation
• Can also be used for public address speakers

55000-825
XP95A Sounder Control Module

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XP95A
Relay
Output Module

XP95A
120V AC Input/
Output Module

The XP95A Relay Output Module provides a single 2-pole changeover relay.

• Loop-powered
• Can be placed anywhere on the loop

55000-863
XP95A Relay Output Module

The XP95A 120V AC Input/Output module is a loop-powered device which incorporates a monitored input circuit for connection to dry contacts, as well as a 120V AC 4A rated dry contact relay output. It is mounted in a plastic facia plate for use with a 4" square or 2 gang electrical back box.

• Loop-powered
• Visible LEDs

55000-859
XP95A 120V AC Input/Output Module

Please check the Apollo website on a regular basis for up-to-date approvals information.

Notification Devices

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XP95A Open-Area Sounder

XP95A Sounder Visual Indicator Base

Discovery UL Open-Area Sounder Visual Indicator

Discovery UL Sounder Visual Indicator Base
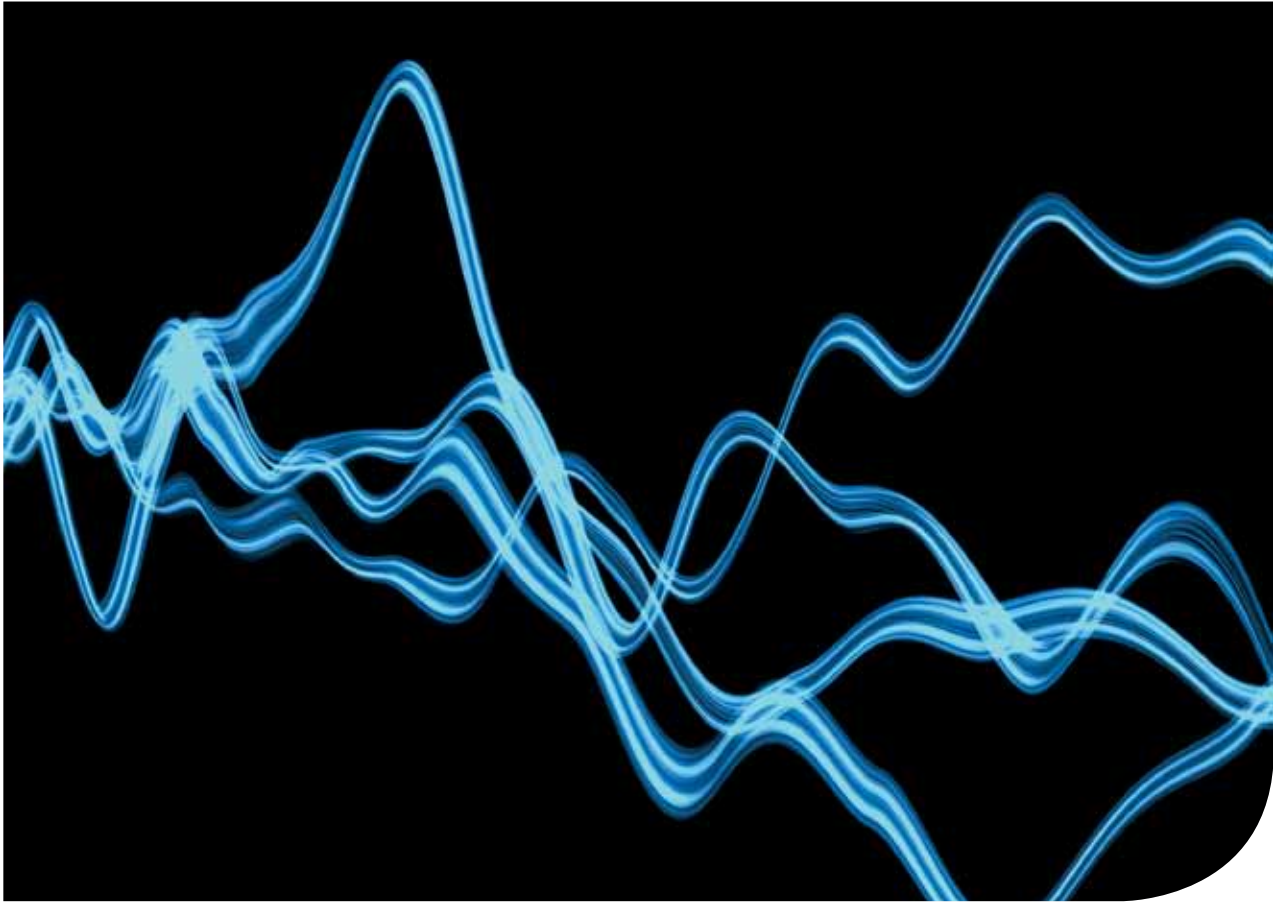
The XP95A Open-Area Sounder has been designed for use in open areas and can be connected to any Discovery UL or XP95A system.

- For use with XP95A and Discovery UL systems
- Self-test trouble monitoring
- Two volume settings 92dB(A) and 100dB(A)
- Synchronisation of tones
- Individual and group addressing
- Built-in isolator
- Available in red or white
- Loop-powered
- IP65 rated

55000-041
XP95A Open-Area Sounder (red)

55000-042
XP95A Open-Area Sounder (white)

The XP95A Sounder Visual Indicator Base is a loop-powered sounder and visual indicator combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas. The sounder visual indicator base can be used either with a detector fitted or with a cap for operation as a stand-alone alarm device.

- Two volume ranges 55-75dB(A) and 75-91dB(A)
- Visual indicator flash rate of once per second
- Synchronisation of 'alert' and 'evacuate' tones
- Synchronisation of visual indicator flash
- Individual and group addressing
- Unique acoustic and visual indicator self-test
- Built-in isolator

45681-525
XP95A Sounder Visual Indicator Base (yellow LEDs)

45681-526
XP95A Sounder Visual Indicator Base (red LEDs)

The Discovery UL Open-Area Sounder Visual Indicator makes full use of the Discovery protocol, designed for use in indoor, outdoor and open areas.

- 15 tone pairs
- Sounder and visual indicator are independently configurable
- Volume and tone settings are independently selectable from the control panel
- Tones can be used for other purposes in addition to warning of fire, ideal for use in schools etc
- Soft start option, ideal for hospitals and nursing homes
- Group and global control for increased response time

58000-011
Discovery UL Open-Area Sounder Visual Indicator (red lens)

58000-012
Discovery UL Open-Area Sounder Visual Indicator (white lens)

The Discovery UL Sounder Visual Indicator Base makes full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

- Sounder and visual indicator are independently configurable
- Volume and tone settings are independently selectable from the control panel
- Tones can be used for other purposes in addition to warning of fire, ideal for schools etc
- Enables soft start option, ideal for hospitals and nursing homes
- Electronic bell tone

45681-524
Discovery UL Sounder Visual Indicator Base (red LEDs)

45681-527
Discovery UL Sounder Visual Indicator Base (yellow LEDs)

29650-001
Magnetic Wand

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Multi-Flex Detector Sounder Base

Multi-Flex Synchronisation Module

NEW

NEW

The Multi-Flex family of smoke detector sounder bases and synchronisation modules provide today's most advanced functionality and performance, delivering flexible notification capabilities for any installation.

The bases offer selectable steady or temporal pattern output and selectable high or low volume levels. The three-pulse temporal pattern is required by NFPA 72 for fire alarm evacuation for commercial and residential applications.

• Compatible with Apollo analogue addressable (XP95A and Discovery UL Series) and conventional (Series 60A and Series 65A) smoke detectors, including heat, photoelectric and ionisation types
• Volume and tone settings are independently selectable
• Backwards compatible with previous generation sounder and relay base models

MB-SDRT-AA
Analogue Addressable Detector Sounder Base

MB-SDRT-CV
Conventional Detector Sounder Base

MB-SDRT-SM/G
Metal 2-Gang Mounting Chassis with White Wall Plate Cover

MB-SDRT-SM/G/R
Metal 2-Gang Mounting Chassis with Red Wall Plate Cover

MB-SDRT-SM/T
Low-Profile Snap-Track with Provided Mounting Screws

MB-SDRT-SM/C
Grey ABS Cover, 18Ga. CRS, Plated with 6" Conduit Knockouts, Top and Bottom

MB-SDRT-SM/C/R
Red ABS Cover, 18Ga. CRS, Plated with 6" Conduit Knockouts, Top and Bottom

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Residential and Light Commercial Wireless Detection

Security and Home Automation sector OEM partners are now offering the reliable, dependable advantage of Apollo life safety devices as part of a wireless product suite. Battery powered combination smoke-heat detectors and carbon monoxide detectors are expertly coupled with wireless transmitters to integrate with the most advanced security and home automation technology on the market today.

Beyond the advantage of Apollo's sleek innovative design, the unique smoke-heat detector benefits from a separate smoke, heat and freeze feature which enables the device to detect one, two or all three. The carbon monoxide detector's hush button feature and condition status communication to the control panel are as highly-regarded as its overall ease of installation.

Please check the Apollo website on a regular basis for up-to-date approvals information.

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Wireless Carbon Monoxide Alarm

Wireless Smoke – Heat Alarm

The Wireless Carbon Monoxide Alarm is a battery powered detector intended for use with a compatible wireless control panel. With a sleek and innovative design the detector can be mounted to any ceiling without being obtrusive to your home.

- • ETL Listed
- • Hush button function
- • Tri colour status indicator
- • Tamper protected
- • Can be controlled remotely
- • Built-in 85 dBA sounder

The Wireless Smoke-Heat Alarm is a battery powered, radio linked smoke/heat detector intended for use with a compatible wireless control panel. The combination of a smoke alarm with a temperature sensor improves response time for both flaming and smouldering fires as well as reduces false alarms from certain nuisances such as cooking fumes.

- • ETL Listed
- • Hush button function
- • Tri colour status indicator
- • Tamper protected
- • Can be controlled remotely
- • Built-in 85 dBA sounder

For more information on these products contact Apollo +44 (0) 2392 492 412

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Pull Stations

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Please check the Apollo website on a regular basis for up-to-date approvals information.

Dual Action Addressable Manual Pull Station

Mini Monitor Module
(Converts standard pull station to addressable)

The Dual Action Addressable Manual Pull Station features translucent plastic at the centre, allowing visibility of an internal LED that indicates alarm condition and polling status. The unit is addressable using a DIP switch protected within the pull station. The pull station may be flush mounted on a single gang work box or use an optional back cover (56000-006).

• Control panel compatibility
• Key lock
• Easily resettable
• Lightweight polycarbonate housing

56000-005
Dual Action Addressable Manual Pull Station

56000-006
Backbox

The Mini Monitor Module is an interface within a housing that allows the unit to be fitted onto a standard 35mm DIN-Rail (using a twist-click motion) or mounted within an enclosure, for example a pull station. It is designed to monitor the state of one or more single pole, voltage-free contacts connected on a single pair of cables and to report the status to Apollo compatible analogue control equipment.

55000-765 Mini Monitor Module

Case Study
High Flyers Protected On The Ground

Summary	
Project Name:	Ministry of Defence Base
Location:	UK
Market:	Government
Products used:	Products from the Discovery range
Installer:	Global Fire Service
Panel:	Advanced Mx-5000

A large Ministry of Defence base in Southern England is now protecting its US Air Force personnel with Apollo Fire Detection equipment in its on-site military accommodation.

Global Fire Services (GFS) were commissioned to refit equipment in more than 500 of the base's single room dormitories, replacing a legacy system which gave the base limited insight into any potential fire risks.

Greg Smith, director at GFS explains more about the new system: "The base now has a more 'intelligent' fire detection system, which not only minimises the risks of false alarms, but also provides those monitoring the systems with a clearer idea of any potential issues.

"It consists of three Advanced Mx-5000, networked four loop addressable control panels, to which the Apollo Discovery devices are connected. On activation of any manual call point or smoke sensor in the common areas or any sprinkler throughout the building, the system will activate all the sounders, shut down the cookers and plant, and report to the on-site signalling system. Thanks to the combination of the Mx-5000 networked panels and Apollo devices the level of data this system is able to gather from the alerts is much more advanced than the previous system and is able to give those managing facilities on site a clearer indication of any next steps required.

"In addition, the Advanced Mx-5000's programming now has comprehensive confirmation filters, an additional step to minimise false alarms in its sleeping quarters. Before the refit, only smoke detectors were present in the dorms – if one was activated the whole building would be alerted and evacuated. With this level of disruption, false alarms were frustrating and costly for the base.

"With Apollo Discovery Multisensors now installed, the fault-tolerant network now has a confirmation setting in place within all of the bedrooms. If any smoke is sensed within the room the local sounder will sound for a five minute interval.

During this time period the system will then change the detector to a heat sensor. If a fire was the cause of the initial alarm heat will also be generated and a full alarm condition will be activated. In addition, any other device activated during this period will also create a full alarm condition. If no other device is activated, or no heat sensed, the local sounder will automatically reset after the five minute timer ends.

"We use Apollo and Advanced's Mx-5000 analogue panels because they are the highest quality available, easily installed and networked and offer superior performance and cause-and-effect and programming. The Mx-5000 work's flawlessly with Apollo's Discovery open protocol. "To provide evidence of system compatibility the base required the new fire detection equipment to comply with EN54-13.

"The Advanced Mx-5000 has been tested and certified to the requirements of EN54-13 for all circuits and for compatibility with the Apollo Discovery range of devices. This means that Apollo's Discovery range and Advanced's Mx-5000 panel work together to deliver a fully EN54 part 13 compliant system, one of the few available."

"Due to the buildings being fully occupied our engineers had to ensure a fully functional system was in place throughout the project. This was adhered to throughout the installation and the job completed ahead of its tight time schedule.

Test Equipment & Maintenance

To keep a fire detection system in good working order, it should be subject to a routine maintenance programme in accordance with locally applicable regulations. Over the course of a year, every detector in the system should be functionally tested at least once, using recommended equipment. Apollo offers a range of test equipment for both conventional and intelligent systems to enable you to do this.

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TEST EQUIPMENT
& MAINTENANCE

XP95 Test Set

Discovery Programmer

Conventional Test Set

Flame Sensor Test Unit and Case

The XP95 Test Set is a self-contained, portable test unit capable of providing a number of useful functions in relation to individual detectors, ancillary devices or complete circuits of analogue addressable devices in the Apollo intelligent ranges. The main function of the test set is to help the engineer guarantee correct loop configuration before an active control panel is installed.

- User friendly LCD information display
- Speedy commissioning
- No unnecessary site visits
- Significant cost reductions

55000-870EUR
XP95 Test Set

The Discovery Programmer is a portable test and configuration tool for Discovery smoke and heat detectors.

- Look up the date of manufacture
- Check the drift compensation value
- Display and change the operating mode
- Select/de-select LED flash mode
- Tests detectors
- Reads approval codes

53832-030
Discovery Programmer

The Conventional Test Set is an invaluable tool designed to give a thorough on-site check of conventional fire detectors within the Apollo Series 65 and AlarmSense ranges. Each test set is supplied with a link head, mains adaptor and carrying case with shoulder strap.

- Easy to use
- Two button select/accept options
- LCD for clear display

53832-020
Conventional Test Set

The Flame Sensor Test Unit is a tool which is designed to test flame detectors without the need of real flames.

- Mimics the characteristics of real flames

29600-226
Flame Sensor Test Unit and Case

Please check the Apollo website on a regular basis for up-to-date approvals information.

Equipment

In addition to the main test kits, Apollo provide a range of equipment to enable you to keep your system in good working order.

Detector installation and removal

Detector Extract Tool

29600-102 Detector Extract Tool

Extension Pole, 1.13m

29600-103 Extension Pole, 1.13m

Telescopic Pole, 1.26m to 4.5m

29600-104   Telescopic Pole, 1.26m to 4.5m

1.5mm Hexagonal Driver (locks detectors to bases)

29600-095   1.5mm Hexagonal Driver   (locks detectors to bases)

In situ functional testing of individual detectors

Solo™

Smoke Dispenser Head

29600-100 Smoke Dispenser Head

Aerosol Test Gas

29600-225 Aerosol Test Gas

Heat Detector Test Pole

29600-229   Heat Detector Test Pole (240V)   **29600-231**   Heat Detector Test Pole (110V)

Cordless Heat Tester Kit

29600-212 Cordless Heat Tester Kit

Cordless Heat Detector Tester

29600-213   Cordless Heat Detector Tester

CO Test Gas

29600-235 CO Test Gas

Detector Duster

29600-449 Detector Duster

Battery Baton

29600-183 Battery Baton

Battery Charger

29600-214 Battery Charger*

Testifire®

Smoke/Heat Unit

29600-459 Smoke/Heat Unit

Smoke/Heat Kit

29600-460 Smoke/Heat Kit

Smoke/Heat/CO Unit

29600-461   Smoke/Heat/CO Unit

Smoke/Heat/CO Kit

29600-462   Smoke/Heat/CO Kit

Replacement Smoke Capsule

29600-463   6-Pack Replacement Smoke Capsule   **29600-464**   3-Pack Replacement Smoke Capsule

Replacement CO Capsule

29600-465   6-Pack Replacement CO Capsule   **29600-466**   3-Pack Replacement CO Capsule

Battery Baton

29600-183 Battery Baton

Battery Charger

29600-214 Battery Charger*

* When ordering please state if you require an EU lead or UK lead.

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TEST EQUIPMENT & MAINTENANCE

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Sequential part number list

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General Conditions of Sale

Apollo Fire Detectors Limited ('the Company')
General Conditions of Sale

All contracts of sale by the Company shall be on and subject to these Conditions. "The Customer" is the person, firm or company set out on the reverse of these conditions.
"The Goods" are the goods of / or Services provided by the Company, details of which are set out on the reverse of these Conditions.

1.1 INFORMATION ABOUT GOODS Any description, specification or drawing published by the Company in relation to the Goods shall not form part of any contract of sale by the Company.

1.2 The Customer in assessing whether the goods are reasonably fit for any particular purpose for which it is purchasing them has not relied on the skill or judgement of the Company.

2.1 ORDERS No order shall be binding on the Company unless and until expressly accepted by the Company in writing.

2.2 No order given may be cancelled or amended unless agreed by the Company in writing.

3.1 CONTRACT The Company shall sell and the Customer shall purchase the Goods in accordance with the written order of the Customer accepted by the Company in writing ("the Order") and with these Conditions (together "the Contract").

3.2 The Contract represents the entire understanding and supersedes any previous agreement between the Company and the Customer in relation to their subject matter.

3.3 The Contract shall not in any circumstances whatsoever be or be deemed to be affected by any previous dealings with the Company and any previous terms and/or conditions issued by the Company are superseded.

3.4 Where the Order Acceptance is on terms which vary from those set out in these Conditions, those terms shall prevail, but otherwise these Conditions shall be deemed to be part of the Contract.

4.1 PRICE The Price payable for the Goods shall be the price specified in the Order, provided that the Company may at any time before delivery, without notice, increase the Price.

4.2 The Price is exclusive of Value Added Tax and the Customer shall pay value Added Tax in respect of the Price at the standard rate prevailing at the date of delivery, together with all other taxes, duties or imports arising in connection with the sale.

5.1 PAYMENT Payment of the Price shall be made in pounds sterling at the office of the Company within 30 days from the date of invoice. All payments shall be made in full without deduction in respect of any right of set-off or counter-claim.

5.2 If the Customer fails to make due payment under the Contract, the Company shall be entitled to interest at the rate of 4% above the base rate of National Westminster Bank PLC from time to time on all outstanding sums from the date that payment fell due until payment is received.

5.3 If the Customer fails to make due payment under the Contract the Company shall be entitled to treat the Contract as repudiated by the Customer.

6.1 DELIVERY The Customer shall promptly, on request made at any time by the Company, provide the Company with any information or instruction it may require in order to supply the Goods.

6.2 Normal delivery terms are ex-works, despatch from Company works (where applicable) shall be deemed to be delivered to the Customer unless the Contract states otherwise.

6.3 Confirmed delivery dates are subject to credit being available at the proposed date of despatch. We will contact you if we are unable to ship because your available credit limit has been exceeded.

6.4 Where the Contract provides that delivery is the Company's responsibility:

6.4.1 Any delivery time indicated by the Company is an estimate only and not an essential term of the Contract.

6.4.2 The Company shall deliver the Goods to the agreed delivery address. Delivery shall be deemed to take place when the Goods arrive at the Delivery Address (before unloading).

6.4.3 The Company shall not be liable for any damage to, deterioration in, or partial loss of the Goods in transit if the matter should have been apparent on a reasonable examination on delivery, unless the Company receives written notice thereof from the Customer within 7 days of delivery.

6.4.4 Where the Company has made part delivery of the Goods it will not be taken under any circumstances to have agreed to waive any lien or right of retention on the remainder of the Goods or to give up possession of the whole of the Goods unless expressly so agreed in writing.

6.5 Where Customer has rejected any of the Goods or notified any damage or deterioration under this Condition 6, the Customer shall, if requested to do so by the Company, return the Goods to the Company within 7 days of such request.

7.1 RISK All risk in the Goods shall pass to the Customer on delivery.

8.1 TITLE - RETENTION OF TITLE CLAUSES Notwithstanding delivery and the passing of risk, property in and title to the Goods shall remain with the Company and shall not pass to the Customer until the Company has received payment of the full price of (a) all Goods the subject of this contract and (b) all other Goods supplied by the Company to the Customer under any contract whatsoever. Payment of the full price shall include, without limitation, the amount of any interest or other sum payable under the terms of this and all other contracts between the Company and the Customer.

8.2 During such time as the property in the Goods remain in the Company the Customer shall store the Goods separately from all other goods and in such a way as clearly to indicate at all times that the said property remains in the Company. The Company's representatives shall be allowed to enter at all reasonable times upon any land or buildings on or in which the Goods may be situated for the purpose of inspecting the way in which the Goods are being kept.

8.3 During such time as the property in the Goods remains in the Company, the Customer in possession of the Goods shall hold the Goods as bailee of the Company and shall have power to deal with the Goods in normal course of its business.

8.4 If the Customer shall sell any of the Goods it shall hold all the proceeds of sale as trustee for the Company and shall (until payment of such proceeds to the Company) place such proceeds in a separate bank account and hold the same to the order of the Company.

9.1 INTELLECTUAL PROPERTY All patent, design, trademark, service mark, copyright and other industrial or intellectual property rights of the Company of whatever nature in respect of the Goods, any of their constituent parts, their packaging or other material supplied with the Goods shall remain the absolute property of and vested in the Company.

9.2 The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims costs and expenses whatsoever suffered or incurred by the Company in connection with any infringement of any patent, design, trademark, service mark, copyright or other industrial or intellectual property right of any other person in connection with the Company's use or application in relation to the Goods or possession of any material or information or instruction supplied by the Customer in relation to the Goods.

10.1 WARRANTY The Company warrants that save only as provided in the Conditions the Goods will on delivery correspond with the Company's specification in respect of them current at the time of delivery.

10.2 Provided that any defect in the condition or performance of the Goods is notified to the Company by the Customer within 10 years (5 years for carbon monoxide detectors) from the date of manufacture, the Company shall correct such defect or replace the Goods (at the Company's discretion) subject to the Customer consenting or procuring consent for access to the Goods by the Company's employees or sub-contractors to carry out any work under this clause. This undertaking is given and shall be accepted by the Customer in lieu of any other remedy.

10.3 The Company shall not be liable under clause 10.2 above if:

10.3.1 The Customer makes any further use of the Goods after giving notice in accordance with clause 10.2;

10.3.2 The defect arises because the Customer failed to follow the Company's oral or written instructions as to the installation, use, maintenance or cleaning of the Goods or (if there are none) good trade practice;

10.3.3 The Customer alters or repairs the Goods without the Company's prior written consent;

10.3.4 The defect arises as a result of fair wear and tear, wilful damage, negligence or abnormal storage or working conditions. For example, the Customer will be responsible for replacing parts that are expected to have a limited working life, such as batteries and rubber seals;

10.3.5 The defect arises as a result of electrical or power supply failure;

10.4 Any notice of defect in the condition or performance of the Goods given by the Customer under clause 10.2 shall be made in writing to the Company within a reasonable time of discovery.

10.5 The benefit of the warranty under clause 10.2 is not transferable.

11.1 LIABILITY The implied terms in the Sale of Goods 1979 are excluded in respect of Customer's dealing otherwise than as consumer, except the implied terms about title.

11.2 Save only as provided in these Conditions the Company shall not be liable for any defect in the Goods caused by the manufacture of the Goods in

accordance with any material, information or instruction supplied or provided by the Customer. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company in connection with any such defect.

11.3 Save only as provided in these Conditions the Company shall not in any event be liable for any special, indirect or consequential loss. Damage, costs or claims including but not limited to loss or damage resulting from negligence and loss of profit or revenue.

11.4 The Company's aggregate liability to the Customer in respect of any and all causes of action arising at any time in connection with the Goods, the Contract or its other subject-matter shall not exceed 125% of the price of the defective goods, which sum the Customer agrees is reasonable.

11.5 These Conditions shall not exclude, restrict or limit any liability the exclusion, restriction or limitation of which is for the time being prohibited by legislation or any right or remedy in respect of any such liability.

11.6 Each of the exclusions, restrictions and limitations of the Company's liability in these Conditions shall be separate and severable from every other such exclusion, restriction or limitation. If a court or competent jurisdiction finds any such exclusions, restrictions and limitations to be unenforceable to any extent the exclusions, restrictions and limitations shall save to such extent remain in full force and effect.

12.1 USE AND SAFETY The Goods are designed only for use in accordance with the Company's operating and maintenance instructions in relation to the Goods at the time of delivery. The Company warns that use, repair or adaptation of the Goods in any other manner may result in damage to the Goods or other property and/or affect the safety of the Goods.

12.2 No undertaking is given by the Company that goods will not infringe the Letters Patent or any other industrial property rights of any third party and the Customer accepts the goods on this understanding and agrees not to pursue any claim against the Company and to hold the Company harmless in respect of any alleged or actual infringement of such third party rights.

12.3 Save only as provided in these Conditions the Company shall not be liable for any loss or damage caused wholly or partly by the fitment to the Goods of any part, accessory or item of equipment which has not been manufactured or approved by the Company or by misuse of the Goods or failure to follow operating or maintenance instructions supplied by the Company. The Customer shall indemnify and keep indemnified the Company against any and all claims whatsoever in respect of any such loss or damage.

13.1 GOODS PURCHASED FOR RESALE In respect of any goods which are purchased by the Customer for resale, the Customer shall not apply its own trade or other marks to the Goods or their packaging without the written consent of the Company.

13.2 In respect of any Goods which are purchased by the Customer for resale, the Customer shall not alter or interfere with the Goods and shall comply with all applicable legislative and other requirements and standards and the Company's instructions in relation to the storage, handling and safety of the Goods. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company arising from any failure by the Customer to comply with this Condition.

14.1 DEFAULT AND TERMINATION If any of the events specified in Condition 14.2 occurs all monies accrued owing under the Contract shall become immediately due and payable and the Company shall be entitled at any time thereafter to terminate the Contract and any other contract between the Company and the Customer by notice and/or to suspend further deliveries of Goods the subject of any or all such contracts.

14.2 The events referred to in clause 14.1 are:
14.2.1 the Customer makes default in or commits a breach of the Contract;
14.2.2 any distress or execution is levied upon the Customer's property or assets;
14.2.3 the Customer makes or offers or proposes to make any arrangement or composition with its creditors, any resolution or petition to wind up the Customer is passed or presented, any petition for an administration order in respect of the Customer is presented, a petition for a bankruptcy order is made against the Customer, or a receiver or manager of the Customer's undertaking, property or assets or any part thereof is appointed; or
14.2.4 the Customer fails to provide any letter of credit, bill of exchange or other security requested by the Company.

15.1 FORCE MAJEURE Should the Company be prevented from or hindered or delayed in performing any of its obligations under the Contract by reason of strike, lock-out or trade dispute, acts of national or local government or other authority, Act of God, storm, tempest, fire, flood, explosion, accident, theft, civil disturbance, insurrection or war or by any other cause whatsoever beyond the Company's reasonable control then the Contract may be suspended and/or cancelled (whether or not while suspended) by the Company without notice and the Company shall have no liability in relation to any failure by it caused by such prevention, hindrance or delay, or any such delay, suspension or cancellation.

16.1 ANTI-BRIBERY CLAUSE The Customer will:
16.1.1 Comply with all applicable laws, regulations, codes and sanctions relating to anti-bribery and anti-corruption including, but not limited to:
16.1.1.a Local and national laws in the territories in which it operates.
16.1.1.b The UK Bribery Act 2010.
16.1.1.c The US Foreign Corrupt Practices Act 1977.
16.1.1.d The UN Convention Against Corruption.
16.1.2 Comply with the Halma plc Group Code of Conduct relating to bribery and corruption which may be found on the Halma website (www.halma.com).
16.1.3 Have in place its own policies and procedures to ensure compliance with this Clause.
16.1.4 Ensure that all parties with which it is associated or who are providing goods or services in connection with this Contract (including subcontractors, agents, consultants and other intermediaries) are aware of and comply with the requirements of this Clause.
16.1.5 Maintain complete and accurate records of all transactions and payments related to this Contract and, on reasonable request, disclose details of those transactions and payments to the Company.
16.1.6 On reasonable request confirm in writing to the Company that it has complied with the requirements of this Clause and, if so requested, allow the Company to verify this compliance by way of an audit of its records.
16.1.7 Immediately inform the Company if it suspects or becomes aware of any breach of this Clause by one of its employees, subcontractors, agents, consultants or other intermediaries and provide detailed information about the breach.

16.2 The Customer will indemnify, keep indemnified and hold harmless (on a full indemnity basis) the Company against all costs, expenses and losses that the Company incurs or suffers as a result of any breach by the Customer of any of its obligations under this Clause. This indemnity will not apply to any fine levied on the Company as a result of the Company's criminal liability.

16.3 If the Customer breaches this Clause the Company shall have the right to terminate this Contract without notice and with immediate effect and will be in no way liable to the Customer in respect of such termination for payment of damages or any other form of compensation.

17.1 GENERAL Each of the rights and remedies conferred on the Company by these Conditions shall be in addition and without prejudice to any other right or remedy which the Company may have under these Conditions or otherwise and in particular to any right to payment of all sums due or to become due in respect of the Goods.

17.2 No failure by the Company to enforce any of its rights under the Contract, or delay by the Company in enforcing any such rights, whether or not after knowledge of any breach of the Customer, shall constitute waiver thereof.

17.3 If any of these Conditions shall be held unenforceable, the remaining Conditions shall not be prejudiced thereby and shall continue in full force and effect.

17.4 Save only as provided in these Conditions time shall not be or be deemed to be of the essence of the Contract.

17.5 The Contract shall be personal to the Customer and the Customer shall not assign any of its rights under the Contract without the prior written consent of the Company.

17.6 Any notice under the Contract shall be given by letter or by telex, facsimile transmission or cable confirmed by letter.

17.7 Any reference in these Conditions to any provision of legislation shall be construed as a reference to that provision as amended, re-enacted or extended at the relevant time. Words in the singular include the plural and vice versa. The headings in these Conditions are for convenience only and shall not affect their interpretation.

17.8 The Contract shall be governed by and construed in all respects in accordance with English law and the Customer shall submit to the jurisdiction of the Supreme Court of justice in England in respect of any matters which may arise in connection with the Contract.

17.9 The Contract represents the entire understanding between the parties and supersedes any previous agreement between the Company and the Customer in relation to the subject matter.

April 2013

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