

AMPAC

ADVANCED WARNING

SYSTEMS

eCATALOGUE **South East Asia**

WORLD LEADER OF INNOVATIVE SOLUTIONS IN FIRE DETECTION AND ALARM SYSTEMS



Ampac Technologies was founded in 1974. With the adoption of three basic core principals, we have grown from a small innovative Australian entity, to a global operation in key markets. Our business is the design, manufacture and distribution of world leading fire detection and alarm systems for commercial, industrial, and multi-residential complexes.

At Ampac, we strive to maintain and improve the vitality of our customer relationships for it is through understanding the needs of our customers that we can truly achieve sustained long term growth. Our aim is to ensure that the entire life cycle of our products is supported by our comprehensive after sales service.

It is a business we are very passionate about. Along the way, we have gained the reputation of a company that operates with integrity coupled with a clear focus and commitment – providing customers at every level with superior customer service. It is a philosophy we continue to improve upon. Ampac is a business focused on long term growth. While we always consider the implications on a wider scale, no detail, imperative for the success of any undertaking, is compromised.



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GasRelease

Conventional Agent Release Panel

GasRelease is the new compact conventional 3 zone fire control panel that includes additional circuitry for controlling the release of extinguishing agents into protected areas. Fully compliant with EN12094-1, GasRelease is ideal for applications housing expensive, dangerous or irreplaceable items. Supported by a wide range of ancillaries, GasRelease is a powerful partner for automatic fire suppression systems.

- z Functions as a standard three zone fire panel with additional circuitry for controlling the release of fire-suppressing gas into protected areas
- z Unique 128 x 64 pixel graphical display facilitates straightforward system programming
- z Includes a pull-down front panel manual release button and two keyswitches for accessing the panel's functions and toggling between auto/manual mode
- z Three conventional sounder circuits (two x 1st stage, one x 2nd stage)
- z Low quiescent current – less than 40mA
- z Abort and hold inputs
- z Time-stamped event log
- z RS485 connections for up to eight flush or surface remote status units with their own LCD, manual release and mode (auto/manual) switches. Single gang economy status units (without an LCD) are also available
- z Extensive range of commissioning and engineering functions
- z Ideal for use in computer rooms, telecommunication centres, archive stores, control rooms, generator rooms, museums, etc





GasRelease Panel

Power Supply

Input Voltage	230VAC, 50/60Hz
Output Voltage	24VDC nominal
Battery Type (maximum)	7 Ahr
Quiescent Current	40mA
Power Supply	3 Amp Switch Mode
PSU output current	1.5 Amp cont. 3 Amp peak

Zone Circuits

Detector Circuits	3 x fully monitored
Fault Supervision	O/C & S/C
Cable Requirements	2 core 1.5 to 2.5mm
Max Cable Length	250m
Max Detectors/Devices per zone	32
End of Line (EOL) value	6K8 ohm ± 5%, 0.25W

General Outputs

Alarm Sounder Outputs	3 x fully monitored
Fault Supervision	O/C & S/C
Sounder Output Rating	19-28VDC @ 200mA each
End of Line (EOL) value	6K8 ohm ± 5%, 0.25W
Auxiliary Relay Outputs	6 x 1 Amp rated @ 30VDC
	Fire
	Local Fire
	Extract
	1st Stage
	2nd Stage
	Fault
Auxiliary Power Output	19-28VDC 100mA fused

Extinguishing Release Outputs

Extinguishant Release Output	1 amp @19-28VDC for 5 mins
Extinguishant Release Time Delay	0-60 seconds – adjustable
Extinguishant Release Duration	0-300 seconds – adjustable
Extinguishant Release Flooding Time	60-1740 seconds – adjustable
Extinguishant Output EOL	System Line Terminator (part number 2980-0005)



GasRelease Panel

Inputs

Supervised Inputs	6 x fully monitored Manual release Flow switch Low Pressure Mode Hold Abort
End of Line (EOL) value	6K8 ohm ± 5%, 0.25W
Remote Inputs	4 x Switched inputs Silence Alarm Fault Reset

Communication Outputs

Remotes Status Units (RSU)	RS485 4 wire (2 wire 24VDC power – 2 wire RS485)
Economy Status Units (ESU)	4 wire (2 wire 24VDC power – 2 wire Mode select)

Environmental

Operating temperature	-5°C to +40°C (no icing)
Relative Humidity	0 to 95% (non condensing)
IP Rating	IP30 indoor use only

Mechanical

Material	Back box metal – lid plastic
Finish	Light Grey
Dimensions	297H x 467W x 99D mm
Weight	4.2kg (without batteries)

GasRelease Panel – 3 Zones 2983-0304



Remote Status Unit

- z Remote indication of system status
- z Clear two colour LCD display and LED indicators
- z Plain text display
- z Mode select – auto/manual key switch
- z Dual action extinguishant manual release button
- z Flush or surface mounting options
- z 4 wire RS485 connection

Voltage	21-28 VDC
Quiescent current	10 mA
Communication input	RS485 4 wire [2 wire 24 VDC power 2 wire RS485]
Max no. of RSUs	8 per system
Monitored inputs	3 - Abort, Hold, Mode
Status display	128 x 64 pixel 2 colour backlit LCD
Dimensions	250H x 175W x 53Dmm (flush) 240H x 160W x 51Dmm (surface)
Weight	1600 grams

Remote Status Unit (Flush)	2980-0001
Remote Status Unit (Surface)	2980-0002



Economy Status Unit

- z Remote indication of system status
- z Mode select – auto/manual key switch
- z Simple LED indication
- z Flush mounting
- z Surface mounting option with single gang back box
- z 4 wire connection

Voltage	21-28 VDC
Quiescent current	5 mA
Communication input	4 wire [2 wire 24 VDC power 2 wire mode select]
Max no. of ESUs	8 per system
Dimensions	87H x 87W x 35Dmm
Weight	70 grams

Economy Status Unit	2980-0003
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Extinguishant Hold Off/Abort Button

- z Delays or cancels the extinguishing release sequence
- z Monitored input to the GasRelease panel
- z 2 wire connection
- z Single gang surface mounting
- z Monitored for open and short circuit faults

Monitored input threshold	8K to 2K (normal) 1.8K to 200ohms (active)
End of Line	6K8
Ingress protection	IP66
Dimensions	93H x 93W x 78Dmm
Weight	250 grams

Extinguishant Hold Off/Abort Button	2980-0006
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Output Expansion Relay Board

- z Five voltage free relay outputs
- z Installed within and directly controlled by the GasRelease panel
- z Outputs for Reset, Mode, Discharged, Hold and Abort

Relay outputs	5 x 30 VDC 1 Amp
Max no. of boards	1 per system
Operating current	8 mA per active relay
Dimensions	160 x 70mm
Weight	60 grams

Output Expansion Relay Board	2980-0004
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System Line Terminator

- z Terminates the GasRelease panel extinguishing output to the release actuators
- z Maximum two solenoids or multiple Metrons™ are supported
- z Suitable for mounting in an appropriate junction box
- z Red active LED indicator

Dimensions	55H x 55W x 22Dmm
Weight	27 grams

System Line Terminator	2980-0005
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LoopSense

Intelligent Control Panel

LoopSense is an Intelligent Analogue Addressable Fire Alarm Control Panel. Available in one or two loops, the LoopSense comes packed with options and features that facilitate flexibility, ease of installation and commissioning.

- z Clear back-lit 40 x 4 line character LCD
- z Advanced balanced loop design for noise rejection
- z 500mA loop current
- z Integrated 32-Zone Indication card
- z Laptop connection via USB 2.0 or RS232 port
- z Auto Learn Facility
- z Removable front door and chassis
- z LoopMaster – user friendly programming software
- z Fully approved to EN54-2 & 4 by the Loss Prevention Certification Board (LPCB)



952a





LoopSense – ABS Cabinet



LoopSense – Metal Cabinet
(Approved to EN54-2 & 4)



LoopSense SmartTerminal
Repeater



LoopSense SmartTerminal
Slim Line Repeater

	Metal	ABS
Power Supply (General)		
Output Voltage	27.5VDC +/- 0.1VDC	27.5VDC +/- 0.1VDC
Battery Type (maximum)	17.2Ah	7.0Ah
Battery Discharged Cut Off Voltage	21VDC	21VDC
Base Panel		
Quiescent Current		
1 Loop Panel	115mA	115mA
2 Loop Panel	135mA	135mA
Loop		
Loop current	500mA max	500mA max
Detectors/Devices per Loop	126 max	126 max
Cabling Requirements	2 core 1.5 to 2.5mm	2 core 1.5 to 2.5mm
Fault supervision	O/C, S/C, overcurrent	O/C, S/C, overcurrent
Protocol	XP95, Discovery	XP95, Discovery
Outputs		
Alarm Sounder Outputs	4 x supervised/programmable 24VDC @ 500mA max	4 x supervised/programmable 24VDC @ 500mA max
Relay outputs	3 x programmable Voltage free 24VDC @ 1A	3 x programmable Voltage free 24VDC @ 1A
Open Collector Output	2 x programmable – 30mA	2 x programmable – 30mA
Auxiliary VDC	2 x protected/programmable 24VDC @ 500mA	2 x protected/programmable 24VDC @ 500mA
Inputs		
Supervised	4 x O/C, S/C, 10K EOL	4 x O/C, S/C, 10K EOL
Communications Port		
Internal to LoopSense	RS485	RS485
External to LoopSense	RS485	RS485
Printer port	RS232 or Parallel	RS232 or Parallel
PC Interfacing	RS232 or USB 2.0	RS232 or USB 2.0



LoopSense – ABS Cabinet



LoopSense – Metal Cabinet
(Approved to EN54-2 & 4)



LoopSense SmartTerminal Repeater



LoopSense SmartTerminal Slim Line Repeater

	Metal	ABS
Electrical		
Power Supply	3A PSU version	2A PSU version
Input Voltage	204 - 264VAC	204 - 264VAC
Protection	3Amp M205	2Amp M205
Output Current	3Amps	1.8Amps
Charger Current	600mA	400mA
Environmental		
Operating temperature	-5°C to +55°C (no icing)	-5°C to +55°C (no icing)
Relative humidity	25% to 75% (non condensing)	25% to 75% (non condensing)
IP rating	IP30	IP30
Mechanical		
Material	1.2mm steel	ABS Blend/High Impact
Finish	Surf Mist Ripple	Cool Grey
Dimensions	425H x 400W x 125Dmm	300H x 360W x 100Dmm
Weight	7kg	2.5kg

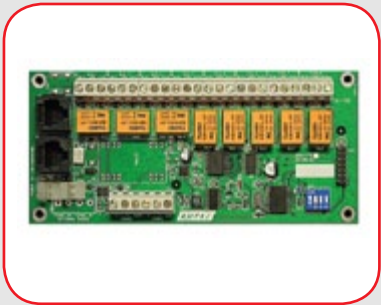
NEW LoopSense Intelligent Control Panel

1 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 2 Amp PSU, ABS	8281-0101
2 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 2 Amp PSU, ABS	8281-0201
1 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 3 Amp PSU, Metal *	8281-0105
1 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 3 Amp PSU, Printer, Metal	8281-0106
2 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 3 Amp PSU, Metal *	8281-0205
2 Loop, 500mA capacity, 32 Zone, 4 alarm circuits, 3 Amp PSU, Printer, Metal	8281-0206

NEW LoopSense SmartTerminal Repeaters

SmartTerminal Repeater without PSU	4380-0011
SmartTerminal Repeater with 2 Amp PSU	4380-0012
SmartTerminal Slim Line Repeater without PSU	4380-0013
Flush Mount Surround for LoopSense Metal	ENC 3004-A
2nd Loop Activation Key	8210-0001

* Approvals: EN54-2 & 4/LPCB



Relay Board

- z Provides volt free change over contacts
- z 8 relay outputs per board
- z Max 1 per LoopSense system
- z Remote version available – DIN Mount chassis
- z Remote version communication via RS485 serial link

Voltage	24 VDC
Quiescent current	2.4 mA
Max current	80 mA
Relay contact rating	3 amp at 24 VDC
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	130 grams

Relay Board	4310-0050
Relay Board (Remote)	4310-0055



Sounder Board

- z Provides 8 monitored switched 24 VDC outputs per board
- z Max 1 per LoopSense

Voltage	24 VDC
Quiescent current	5.6 mA
Max current	26 mA
Output rating (ea)	500 mA at 24 VDC
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

Sounder Board	4310-0060
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8 Zone Conventional Board

- z** Supports up to eight conventional zones
- z** Selectable end of line device 3K3, 4K7, 6K8, 10K or 10μF capacitor
- z** Supports head removal requirement on each zone
- z** Supports up to 40 conventional devices per zone circuit (Apollo Series 65 or Orbis)
- z** Programmable latching and non-latching (self-resetting) input on each zone circuit
- z** Fully compatible with other Ampac LoopSense Add-Ons

Voltage	24 VDC
Quiescent current	15mA (including capacitive EOL current) plus device current
Alarm current	43mA (one circuit in alarm)
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Size	72.5 x 155mm
Weight	120 grams

8 Zone Conventional Board	4310-0082
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FireFinder

Conventional / Intelligent Fire Alarm Control Panel

FireFinder is a state of the art multi microprocessor controlled Intelligent Fire Alarm Control Panel. Modular in design, the FireFinder provides flexibility and versatility that can be configured to operate with both intelligent analogue addressable and conventional devices in the one system.

Available in single loop or multiple loop configurations, the FireFinder supports the leading Apollo XP95 and Discovery detector protocols. The Ampac ConfigManager software tools provide a powerful combination with the FireFinder to configure the system operational and functional characteristics of an installation. Enhanced networking capabilities offer the user extended applications with FireFinder incorporating a Master/ Slave Fire control panel arrangement, true Peer to Peer systems, data gathering panels and SmartGraphics a PC based application for the supervision, monitoring and control of larger fire management systems.

- z Clear back-lit 40 character 8 line LCD display
- z Programming options via the front panel or laptop computer
- z Remote system interrogation and diagnostics
- z Extensive Alarm Management resources
- z Self Auto Learn capabilities
- z Day Night sensitivity settings
- z Versatile multi processor architecture
- z Event log and printer options
- z SPOT – Single Person Operation Test
- z Flexible modular expansion and panel Add Ons
- z SmartTerminal repeater options





FireFinder CP10-1/SP1X
Conventional / Intelligent Control Panel
with glazed outer door



FireFinder CP10-4/SP8X
Conventional / Intelligent Control Panel
with glazed outer door

Electrical

Mains Supply Voltage	85-264 VAC
Output Voltage	27 VDC
Power Supply Current	5.6 Amps
Quiescent Current (1 Loop 32 Zone LEDs)	280-330 mA

Outputs

Sounder 1-1 – Programmable Monitored	2 Amps
Sounder 1-2 – Programmable Monitored	2 Amps
Sounder 2 – Programmable Monitored	1 Amp
F.A.R.E. Fire Alarm Routing Equipment – Monitored	1 Amp
F.W.R.E. Fault Warning Routing Equipment – Monitored	1 Amp
F.A.R.E. Fire Alarm Routing Equipment – Relay Output	Voltage Free 1 Amp @ 30v
F.W.R.E. Fault Warning Routing Equipment – Relay Output	Voltage Free 1 Amp @ 30v
Disable Relay	VFCO 1 Amp @ 30v
Alarm Relay	VFCO 1 Amp @ 30v
Valve Monitor Relay	VFCO 1 Amp @ 30v
Battery Fail Relay	VFCO 1 Amp @ 30v

Environmental

Operating temperature	-5°C to +55°C (no icing)
Relative humidity	25% to 75% (non condensing)
IP rating	IP30

Mechanical

Materials	1.2mm steel
Construction	Modular
Case Finish	Red Ripple
Dimensions	CP10-1/SP1X 500H x 400W x 140D mm CP10-4/SP8X 840H x 515W x 140D mm



FireFinder CP10-1/SP1X
Conventional / Intelligent Control Panel
with glazed outer door



FireFinder CP10-4/SP8X
Conventional / Intelligent Control Panel
with glazed outer door

SINGAPORE

FireFinder CP10-1 Conventional Control Panel 16 zone	8565-0100
FireFinder CP10-4 Conventional Control Panel 16 zone	8565-0200
FireFinder CP10-1 Intelligent Control Panel 1 loop	8565-1100
FireFinder CP10-4 Intelligent Control Panel 1 loop	8565-4100

Approvals: Singapore Code of Practice CP10:2005

MALAYSIA

FireFinder SP1X Conventional Control Panel 16 zone	8560-0100
FireFinder SP8X Conventional Control Panel 16 zone	8560-0200
FireFinder SP1X Intelligent Control Panel 1 loop	8560-1100
FireFinder SP8X Intelligent Control Panel 3 loop	8560-4300

Approvals: MS1404: Part 4: 1996



Dot Matrix Panel Printer

- z The dot matrix printer provides hardcopy activity report
- z Alarms, faults, isolates and system logs may be printed
- z 3 colour status LED
- z Self test mode
- z Easy maintenance for replaceable ribbon cassette and paper roll
- z Print loop statistics

Voltage	5 VDC
Quiescent current	1A @ 5 VDC
Character size	5 x 7 dots
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	25 to 95% (non condensing)
Weight	380 grams

Dot Matrix Panel Printer	159-0111
Paper – 10 rolls	MIS1981
Ribbon	MIS1982



SmartTerminal Repeater

The SmartTerminal Repeater is an LCD annunciator designed to remotely display the status and provide control of the FireFinder Fire Alarm Control Panel.

- z 4 line 40 character backlit LCD display
- z 2 wire RS485 communication to the FireFinder
- z Reset, Activate or Silence alarms
- z Programmable to display Alarms and/or Faults and Isolates
- z Flush or surface mounting
- z Slimline version available

Voltage	24 VDC
Quiescent current (backlight/buzzer off)	12.4 mA
Max current (backlight/buzzer on)	44 mA
Max distance from main panel	1.2 km
Auxiliary output (monitored)	27 VDC 500 mA
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	25 to 95% (non condensing)
Size	SmartTerminal Repeater 300H x 360W x 100Dmm
	SmartTerminal Slimline Repeater 195H x 324W x 52Dmm
Weight	SmartTerminal Repeater 2.5 kg
	SmartTerminal Slimline Repeater 1 kg

SmartTerminal Repeater without PSU	4380-0001
SmartTerminal Repeater with 2 Amp PSU	4380-0002
SmartTerminal Slimline Repeater without PSU	4380-0003



Network Interface Card (NIC)

- z The NIC gives the FireFinder network capabilities via the RS422 communications port
- z Provides an additional RS232 communications port when connected to Controller Interface Card (CIC)
- z High level interface for Building Management or ModBus protocol for SmartGraphics and PLCs
- z The NIC can be isolated from other network devices
- z Loop In/Loop Out for easy installation

Voltage	24 VDC
Quiescent Current	65 mA
Available Ports	RS422 – network RS232 – serial comms
Max distance (between NICs)	1.2km
Cable requirements	RS422 – 2 pair twisted/screened RS232 – 1 pair twisted/screened
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	225 grams

Network Interface Card – NIC (4 wire) 159-0053



Controller Interface Card (CIC)

- z The CIC gives the FireFinder additional RS232 and RS485 capabilities
- z Acts as a Controller board interface when used with a NIC
- z The RS232 communications port provides for Building Management, ModBus or serial printer
- z The RS485 communications port provides for Building Management, ModBus or LED repeaters

Voltage	24 VDC
Quiescent Current	5 mA
Available Ports	RS232 – serial communications RS485 – half duplex multi drop
Max distance	RS232 – 15m RS485 - 1.2km
Cable requirements	RS232 – 1 pair twisted/screened RS485 – 1 pair twisted/screened
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	125 grams

Controller Interface Card (CIC) 159-0054



Analogue Loop Upgrade Kit

- z** This kit adds an intelligent analogue loop to the FireFinder Control Panel
- z** For an odd numbered loop upgrade the kit consists of an I/O CPU module, cable and termination card
- z** An even numbered loop upgrade consists of an I/O CPU module and cable

Voltage	24 VDC
Quiescent current	40 mA
Loop current	250 mA max.
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	200 grams

1 Loop Upgrade Kit – even numbered loop	159-0001
1 Loop Upgrade Kit and processor – odd numbered loop	159-0003



Loop Module Expansion Kit

- z** Expands the capacity of the FireFinder to accommodate a further four loops, 64 conventional zones, four I/O modules or any combination of the above
- z** Requires a main controller board

Voltage	24 VDC
Quiescent current	5 mA
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	110 grams

Loop Module Expansion Kit	159-0045
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8 Way Serial Relay Output Board

- z** Each serial relay output board offers 8 voltage free relay outputs, each rated at 5 amps, 24 VDC
- z** Each relay has a single normally open/close volt-free contact extended to a wire-protected screw terminal
- z** The serial 8-way relay is driven directly from the main controller board

Voltage	24 VDC
Quiescent current	5 mA
Relay output current	5 Amps at 24 VDC
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	190 grams

8 Way Serial Relay Output Board 159-0072



4 Plus 4 Bell Monitor Board

- z** The 4 Plus 4 Bell Monitor has screw terminals for 4 voltage free contacts and 4 switched 24V DC sounder outputs
- z** The outputs are programmable and monitored for open or short circuit
- z** The board connects directly to the main controller board

Voltage	24 VDC
Quiescent current	20 mA
Relay output current	1 Amp at 24 VDC
Sounder output current	1 Amp each
Capacity	8 boards per main controller
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	250 grams

4 Plus 4 Bell Monitor Board 159-0069



8 Way Bell Monitor Board

- z The 8-Way Bell Monitor has 8 switched 24V DC sounder outputs
- z The outputs are programmable and monitored for open or short circuit
- z The board connects directly to the main controller board

Voltage	24 VDC
Quiescent current	20 mA
Max sounder output current	1 Amp each
Max output current	4 Amps per board
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	250 grams

8 Way Bell Monitor Board	159-0071
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16 Way Conventional Zone Card

- z Adds 16 conventional Alarm Zone Circuits
- z Kit consists of an I/O CPU module, cable and 16 zone termination card
- z Supports up to 40 conventional detectors (Series 65 or Orbis) per zone
- z Fixed 3K3 End-Of-Line device

Voltage	24 VDC
Quiescent current	145 mA
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	185 grams

16 Way Conventional Zone Card	159-0005
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Panel Mounted LED Indicators

- z Provide flexibility to include additional LED indicators to the FireFinder SP1X and SP8X
- z Available in three versions:
 - 32 zone alarm only indication (red)
 - 16 zone alarm/fault indication (red/amber)
 - 32 zone general indication (amber)
- z Serial connection to the FireFinder panel
- z Simple clip installation
- z Indicators remain illuminated until reset by the panel
- z Indicators are tested by the FireFinder panel's lamp test control



Voltage	27 VDC
Quiescent current	30 mA
Max current	40 mA
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

FireFinder SP1X 32 Zone Alarm Only Indication (Red)	159-0106
FireFinder SP8X 32 Zone Alarm Only Indication (Red)	159-0089
FireFinder SP1X 16 Zone Alarm/Fault Indication (Red/Amber)	159-0107
FireFinder SP8X 16 Zone Alarm/Fault Indication (Red/Amber)	159-0108
FireFinder SP1X 32 Zone General Indication (Amber)	159-0123
FireFinder SP8X 32 Zone General Indication (Amber)	159-0124

Remote Mounted LED Indicators

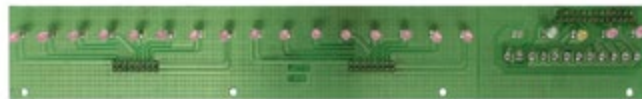


FireFinder LED Mimic Driver

- z** The remote LED indicator boards provide facilities to mimic the FireFinder zonal LEDs and switches
- z** Connects to the RS485 communications bus via the controller interface card
- z** Allows the custom design of geographic site layout mimics
- z** Each termination board connects up to 32 zone LEDs – 31 boards maximum – total 992 zone indications



Mimic Output Termination Board



Remote Expansion LED Board

Voltage	27 VDC
Quiescent current	8 mA max
Max current	100 mA
Communication mode	RS485
Baud rate	19200 max
Communication cable	1 x pair twisted and screened
No. of boards	31 max
No. of zones	992 zones max
Buzzer external max current	20 mA
On board status indication	Power on – green Normal – green Fault – yellow
Common inputs	Reset Lamp test Buzzer mute Bell isolate Manual evacuate
Operating temperature	-5°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)

FireFinder LED Mimic Driver	302-7150
Mimic Output Termination Board	BRD85MOTB1-A
Remote Expansion LED Board	302-7330

Orbis

Conventional Detectors

Orbis is a range of conventional detectors which has been developed with sophisticated technology previously only found in intelligent detectors. Orbis is a range with modern styling and incorporates a mounting base which saves installation time.

- z Automatic drift compensation with DirtAlert® warning
- z Patented FasTest® which reduces the time taken to test detectors
- z SensAlert® uses a flashing LED to indicate that the sensor is not operating correctly
- z StartUp™ for fast commissioning
- z Attractive and compact design
- z Electrically compatible with Series 60 and Series 65
- z Wide voltage and operating temperature ranges
- z Algorithms for transient rejection
- z Flashing LED option
- z 360° visibility of LEDs
- z Insect resistant





Orbis Optical Smoke Detector

The Orbis Optical Smoke Detector works using the well established light scatter principle, however, the sensing technology is radically different in design from previous optical detectors and significantly reduces false alarms.

- z Responds well to slow-burning, smouldering fires
- z Performs well in black and white smoke
- z Extra confirmation of smoke before alarm signal is given
- z Reduced incidence of false alarms
- z Sensing chamber keeps out dust and other airborne contaminants
- z Operates over a broad range of voltages at extremes of temperature

Approvals: EN54-7/LPCB

Operating voltage	8.5 to 33 VDC
Quiescent current	65µA at 24 VDC
Alarm current	40mA at 24 VDC
Remote output	1.2kΩ to -ve supply
Size	97Dia x 31H mm
Operating temperature	-40°C to +70°C (no icing)
Relative humidity	0 to 98% (non condensing)
IP rating	IP23D (EN60529)
Weight	75 grams

Orbis Optical Smoke Detector ORB-OP-12001-AMP



Orbis Multisensor Detector

The Orbis Multisensor Detector benefits from the same false alarm reduction technology as the optical detector. It is a thermally enhanced smoke detector and so will not give an alarm from heat alone.

- z Responds well to fast-burning, flaming fires
- z Reduced incidence of false alarms
- z Increased reliability of detection
- z Sensing chamber keeps out dust and other airborne contaminants
- z Operates over a broad range of voltages at extremes of temperature

Approvals: EN54-7/LPCB

Operating voltage	8.5 to 33 VDC
Quiescent current	65µA at 24 VDC
Alarm current	40mA at 24 VDC
Remote output	1.2kΩ to -ve supply
Size	97Dia x 42H mm
Operating temperature	-40°C to +70°C (no icing)
Relative humidity	0 to 98% (non condensing)
IP rating	IP23D (EN60529)
Weight	80 grams

Orbis Multisensor Detector ORB-OH-13001-AMP



Orbis Heat Detector

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

- z Can be used for applications where smoke detectors are unsuitable
- z Ideal in environments that are dirty or smokey under normal conditions
- z Reduced incidence of false alarms
- z Increased reliability of detection

Approvals: EN54-5/LPCB

MAT Maximum Application Temperature

Operating voltage	8.5 to 33 VDC
Quiescent current	65µA at 24 VDC
Alarm current	40mA at 24 VDC
Remote output	1.2kΩ to -ve supply
Size	97Dia x 36H mm
Operating temperature	-40°C to +70°C (no icing)
Relative humidity	0 to 98% (non condensing)
IP rating	IP23D (EN60529)
Weight	70 grams

Orbis Heat Detector	
A1R Standard 50°C MAT Rate-of-Rise	ORB-HT-11001-AMP
A1S Standard 50°C MAT Static	ORB-HT-11166-AMP
A2S Standard 50°C MAT Static	ORB-HT-11002-AMP
BR Standard 65°C MAT Rate-of-Rise	ORB-HT-11003-AMP
BS Standard 65°C MAT Static	ORB-HT-11004-AMP
CR Standard 80°C MAT Rate-of-Rise	ORB-HT-11005-AMP
CS Standard 80°C MAT Static	ORB-HT-11006-AMP



TimeSaver Base

The 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.

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

Approvals: EN54/LPCB

Size	100Dia x 8H mm
IP rating	IP23D (EN60529)
Weight	60 grams

TimeSaver Base	ORB-MB-00012-AMP
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TimeSaver Diode Base

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 house active EOL monitoring for head removal.

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

Approvals: EN54/LPCB

Size	100Dia x 8H mm
IP rating	IP23D (EN60529)
Weight	60 grams

TimeSaver Diode Base	ORB-DB-00003-AMP
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TimeSaver Relay Base

The TimeSaver Relay Base incorporates a single pole voltage-free change-over 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.

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

Approvals: EN54/LPCB

Size	100Dia x 8H mm
Operating temperature	-40°C to +70°C
Humidity	0 to 98%
IP rating	IP23D (EN60529)
Weight	60 grams

TimeSaver Relay Base	ORB-RB-10004-AMP
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AMPAC Addressable Optical Smoke Detector

The AMPAC Addressable Photo Detector continuously monitors the environment for contamination of clean air by smoke particles. This facilitates early warning of incipient fires.

- z Detects a wide range of fires
- z Insensitive to wind
- z Transient voltage protection
- z Fine gauze insect protection
- z Simple construction allows detection chamber to be cleaned
- z Lockable security fitting
- z White Finish
- z DIL switch address setting

Approvals: EN54/LPCB

Operating voltage	17-28 VDC
Quiescent current	340µA at 24 VDC
Alarm current	4.3mA at 24 VDC
Remote output	4mA @ 5VDC
Size	100Dia x 50H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP43
Weight	157 grams

AMPAC Addressable Optical Smoke Detector 55000-665AMP



AMPAC Addressable Heat Detector

The AMPAC Addressable Heat Detector monitors temperature by using a single thermistor network that provides a voltage output proportional to the external air temperature.

- z Rate of rise and fixed temperature alarm point
- z Single thermistor technology
- z Transient voltage protection
- z Resettable operation
- z Lockable security finish
- z White finish
- z DIL switch address setting

Approvals: EN54/LPCB

Operating voltage	17-28 VDC
Quiescent current	250µA at 24 VDC
Alarm current	2.5mA at 24 VDC
Remote output	4mA @ 5VDC
Size	100Dia x 50H mm
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP53
Weight	157 grams

AMPAC Addressable Heat Det STD (55°C) 55000-465AMP
 AMPAC Addressable Heat Det HIGH (90°C) 55000-475AMP



Standard Base

All detectors in the Ampac Addressable range fit the Intelligent Detector Base. It is a low insertion force base with stainless steel contacts for the detector terminals.

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

Approvals: EN54-5, 7 & 8/LPCB

Size	100Dia x 8H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	55 grams

Standard Base	45681-200AMP
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Deep Base

All detectors in the Ampac Addressable range fit the Intelligent Detector Base. It is a low insertion force base with stainless steel contacts for the detector terminals.

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

Approvals: EN54-5, 7 & 8/LPCB

Size	100Dia x 8H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	55 grams

Deep Base	45681-213AMP
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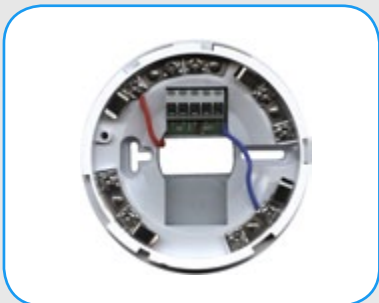
Relay Base

The Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

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

Voltage	17-28 VDC
Quiescent current	5mA at 24 VDC
Size	100Dia x 24H mm
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

Relay Base	45681-504AMP
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Isolating Base

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

- z Up to 20 devices may be installed between isolating bases
- z High brightness LED

Voltage	17-28 VDC
Quiescent current	47µA (non isolating) 4mA (isolating)
Size	100Dia x 24H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

Isolating Base	45681-505AMP
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XP95

Intelligent Detectors

The XP95 range of intelligent 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 (ionisation and optical), 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.

Features

- z Alarm Flag for fast alarm reporting
- z Alarm Address for fast location of alarm
- z XPERT card addressing
- z Electronics-free base
- z Easy installation
- z Elegant design
- z Insect Resistant





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.

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

Approvals: EN54-7/LPCB

Voltage	17-28 VDC
Quiescent current	280µA at 24 VDC
Alarm current	2.0mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Weight inc base	161 grams

XP95 Ionisation Smoke Detector	55000-520-AMP
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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.

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

Approvals: EN54-7/LPCB

Voltage	17-28 VDC
Quiescent current	340µA at 24 VDC
Alarm current	4mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Weight inc base	157 grams
Sensitivity	0.12db/m

XP95 Optical Smoke Detector	55000-620-AMP
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XP95 Heat Detector

The XP95 Heat Detector monitors temperature by using a single thermistor network which provides a count output proportional to the external air temperature. The XP95 range features two Heat Detectors, standard and high emperature. 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.

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

Approvals: EN54-5/LPCB

Voltage	17-28 VDC
Quiescent current	250-270µA at 24 VDC
Alarm current	2mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	A2S: -20°C to +70°C (no icing) CS: -20°C to +120°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP53
Weight inc base	157 grams

XP95 Heat Detector Standard – A2S	55000-420-AMP
XP95 Heat Detector High Temperature – CS	55000-401-AMP



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.

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

Voltage	17-28 VDC
Quiescent current	500µA at 24 VDC
Alarm current	3.5mA at 24 VDC
Size inc base	100Dia x 58H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP53
Weight inc base	160 grams

XP95 Multisensor Detector	55000-885-AMP
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XP95 Intelligent Detector Base

All detectors in the XP95 range fit the Intelligent Detector Base. It is a low insertion force base with stainless steel contacts for the detector terminals.

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

Approvals: EN54-5, 7 & 8/LPCB

Size	100Dia x 8H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	55 grams

XP95 Intelligent Detector Base	45681-210-AMP
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XP95 Isolating Base

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

- z Up to 20 devices may be installed between isolating bases
- z High brightness LED

Voltage	17-28 VDC
Quiescent current	47µA (non isolating) 4mA (isolating)
Size	100Dia x 24H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

XP95 Isolating Base	45681-284-AMP
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XP95 Intelligent Low Power Relay Base

The Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

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

Voltage	17-28 VDC
Quiescent current	5mA at 24 VDC
Size	100Dia x 24H mm
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

XP95 Intelligent Low Power Relay Base	45681-242-AMP
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Blank XPERT Card

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

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

Pre-addressed XPERT Card

Pre-addressed XPERT cards are supplied with pips already removed.

- z Saves time and increases accuracy during commissioning
- z Pre-numbered 1-126

Blank XPERT Card	38531-771-AMP
Pre-addressed XPERT Card 1-126	45682-127-AMP



XP95 Manual Call Point

The XP95 Manual Call Point is compliant with EN54-11. 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.

- z Plug-and-play terminal connectors for fast wiring
- z Allows wiring continuity testing before fitting
- z Isolated version available
- z Reports an alarm in under 0.2 seconds
- z Resettable element

Approvals: EN54-11/LPCB
EN54-17/LPCB (Isolated Version)

Voltage	17-28 VDC
Quiescent current	100µA at 24VDC
Alarm current	4mA
Address method	7 segment DIL switch
Size (surface mount)	93H x 89W x 59.5D mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0-95% (non condensing)
IP rating	IP45
Weight	190 grams

XP95 Manual Call Point (Surface)	55100-905-AMP
XP95 Manual Call Point with Isolator (Surface)	55100-908-AMP



Intelligent Waterproof Manual Call Point

The Intelligent Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur.

- z Plug and play terminal connections for fast wiring
- z Allow wiring continuity testing before fitting
- z Isolated version available
- z Resettable element

Approvals: EN54-11/LPCB
EN54-17/LPCB (Isolated Version)

Voltage	17-28 VDC
Quiescent current	230µA
Alarm current	2mA
Address method	7 segment DIL switch
Size (surface mount)	87H x 87W x 54D mm
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0-95% (non condensing)
IP rating	IP67
Weight	400 grams

Intelligent Waterproof Manual Call Point	58100-950-AMP
Intelligent Waterproof Manual Call Point with Isolator	58100-951-AMP



XP95 Intelligent Reflective Beam Detector

The XP95 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 four-reflector unit for distances of 50-100m.

- z Loop-powered, requires no external supply
- z Compatible with Discovery and XP95 protocols
- z Incorporates a short-circuit isolator
- z Automatic drift compensation
- z Automatic reset following alarm or fault condition

Input voltage	17-28 VDC
Quiescent current	5µA @ 24 VDC
Alarm current	9mA at 24 VDC
Dimensions	210H x 150W x 120D mm
Operating temperature	-20°C to +55 °C (no icing)
Relative humidity	0-95% (non condensing)
IP rating	IP50
Weight	670 grams
Min beam distance	5 metres
Max beam distance	100 metres

Reflective Beam Detector 5-50m	55000-268-AMP
Reflective Beam Detector 50-100m	55000-273-AMP
Beam Detector Reflector 100mm x 100mm	29600-201-AMP
Termination Back Box	29600-241-AMP

Discovery

Intelligent Detectors

Discovery is a range 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 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 reducing false alarms.

- z Rejection of transient signals
- z Flashing LED option
- z Five response modes for ease of optimisation to changing environments
- z Drift compensation to ensure constant sensitivity
- z Four bytes of non-volatile memory for user data
- z Alarm flag for fast alarm reporting
- z Conventional alarm facility during control panel processor fault
- z 360° visibility in alarm
- z Compatible with XP95 systems
- z Insect resistant





Discovery Ionisation Smoke Detector

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

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

Approvals: EN54-7/LPCB

Voltage	17-28 VDC
Quiescent current	500µA at 24 VDC
Alarm current	3.5mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP43
Weight inc base	160 grams

Discovery Ionisation Smoke Detector	58000-500-AMP
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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.

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

Approvals: EN54-7/LPCB

Voltage	17-28 VDC
Quiescent current	400µA at 24 VDC
Alarm current	3.5mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP43
Weight inc base	160 grams

Discovery Optical Smoke Detector	58000-600-AMP
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Discovery Heat Detector

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

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

Approvals: EN54-5/LPCB

Voltage	17-28 VDC
Quiescent current	500µA at 24 VDC
Alarm current	3.4mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	0°C to +80°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP53
Weight inc base	160 grams

Discovery Heat Detector 58000-400-AMP

Heat Detector Response Modes	Mode	Class (EN54-5:2000)	Application Temperature °C		Static Response Temperature °C		
			Typ	Max	Min	Typ	Max
	1	A1R	25	50	54	57	65
2	A2	25	50	54	61	70	
3	A2S	25	50	54	61	70	
4	CR	55	80	84	90	100	
5	CS	55	80	84	90	100	

For air temperatures in the range 15°C to 55°C, the analogue value for a detector in mode 1 will correspond approximately to the air temperature.



Discovery Multisensor Detector

The Discovery Multisensor Detector comprises optical 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.

- z Ideal for a wide range of applications
- z Highly immune to false alarms
- z Well suited for environments such as hotel bedrooms
- z Unaffected by wind or atmospheric pressure
- z Well suited for sensitive environments
- z Heat only, optical only options
- z Remote test feature

Approvals: EN54-5/LPCB
EN54-7/LPCB

Voltage	17-28 VDC
Quiescent current	500µA at 24 VDC
Alarm current	3.5mA at 24 VDC
Size inc base	100Dia x 58H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP43
Weight inc base	160 grams

Discovery Multisensor Detector	58000-700-AMP
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Multisensor Detector Operating Modes	Mode	Smoke Sensitivity (grey smoke)		Temperature Sensitivity (relative)	Response Type	Minimum Time to Alarm (seconds)
		% per m	% per ft			
	1	1.1	0.35	High	Multisensor	20
	2	2.1	0.7	No response to heat	Optical	30
	3	2.8	0.9	Low	Multisensor	20
	4	4.2	1.4	High	Multisensor	20
	5	No response to smoke		See text	Heat A1	30



Discovery Carbon Monoxide Detector

The Discovery Carbon Monoxide (CO) 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.

- z Enhanced detection capability
- z Early response to hot fires
- z Ideal for smouldering fires
- z Less susceptible to false alarms caused by steam than smoke alarms
- z Five response modes

Voltage	17-28 VDC
Quiescent current	500µA at 24 VDC
Alarm current	3.5mA at 24 VDC
Size inc base	100Dia x 50H mm
Operating temperature	0°C to +50°C (no icing)
Relative humidity	15 to 95% (non condensing)
IP rating	IP43
Weight inc base	160 grams
Cell life (max)	7 years

Discovery Carbon Monoxide Detector	58000-300-AMP
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	Mode	Alarm Threshold (ppm)	Minimum Time to Alarm (seconds)	Typical Application
Relative Performance of Detectors in Test Fires	1	30	60	Sleeping with no ambient CO
	2	45	30	General use fast response such as supplementary protection in atria
	3	45	60	General use and sleeping risk with some low-level CO (such as from light smoking or an unventilated gas fire)
	4	60	30	General smoking area and supplementary detection of deep seated fires such as laundry rooms
	5	75	30	Supplementary use in kitchen or boiler room



Discovery Intelligent Detector Base

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

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

Approvals: EN54-5/LPCB
 EN54-7/LPCB
 EN54-8/LPCB

Size	100Dia x 8H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	55 grams
Discovery Intelligent Detector Base	
45681-210-AMP	



Discovery Isolating Base

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

- z Up to 20 devices may be installed between isolating bases
- z High brightness LED

Voltage	17-28 VDC
Quiescent current	47µA (non isolating) 4mA (isolating)
Size	100Dia x 24H mm
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams
Discovery Isolating Base	
45681-284-AMP	



Discovery Intelligent Low Power Relay Base

The Intelligent Low Power Relay Base incorporates a low power relay to control field equipment such as automatic door closers.

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

Voltage	17-28 VDC
Quiescent current	5mA at 24 VDC
Size	100Dia x 24H mm
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	100 grams

Discovery Intelligent Low Power Relay Base	45681-242-AMP
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Blank XPERT Card

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

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

Pre-addressed XPERT Card

Pre-addressed XPERT cards are supplied with PIPs already removed.

- z Saves time and increases accuracy during commissioning
- z Pre-numbered 1-126

Blank XPERT Card	38531-771-AMP
Pre-addressed XPERT Card 1-126	45682-127-AMP



Discovery Manual Call Point

The Discovery Manual Call Point is compliant with EN54-11. 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.

- z Plug-and-play terminal connectors for fast wiring
- z Allows wiring continuity testing before fitting
- z Isolated version available
- z Reports an alarm in under 0.2 seconds
- z Resettable element

Approvals: EN54-11/LPCB
EN54-17/LPCB (Isolated Version)

Voltage	17-28 VDC
Quiescent current	100uA
Alarm current	4mA
Address method	7 segment DIL switch
Size (surface mount)	87H x 87W x 52D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0-95% (non condensing)
IP rating	IP53
Weight	190 grams

Discovery Manual Call Point with Isolator (Surface)	58100-908-AMP
Discovery Manual Call Point (Surface)	58100-910-AMP



Discovery Waterproof Manual Call Point

The Discovery Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur. It can be used with the XP95 and Discovery ranges.

- z Plug and play terminal connections for fast wiring
- z Allow wiring continuity testing before fitting
- z Isolated version available
- z Resettable element

Approvals: EN54-11/LPCB
EN54-17/LPCB (Isolated Version)

Voltage	17-28 VDC
Quiescent current	100uA
Alarm current	4mA
Address method	7 segment DIL switch
Size (surface mount)	93H x 97.5W x 71D mm
Operating temperature	-30°C to +70°C (no icing)
Humidity	0-95% (non condensing)
IP rating	IP67
Weight	240 grams

Discovery Waterproof Manual Call Point	58100-950-AMP
Discovery Waterproof Manual Call Point with Isolator	58100-951-AMP

XP95/Discovery

Intelligent Interfaces

Apollo manufactures a comprehensive range of interfaces for intelligent systems which enable fire protection systems 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.

Standard Interfaces with Isolators are fitted with bi-directional short-circuit isolators so that they are unaffected by a single short circuit on either loop input or output. However, the Input/Output Unit and Output Unit with isolator are exceptions to this. The removal of loop power to these interfaces will cause a 'set' relay to 'reset'.

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 determine the functions required and create multi-purpose interfaces for individual sites.

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





Input/Output Unit with Isolator

The Input/Output unit with Isolator provides a voltage free, single, pole, change-over relay output, a single, monitored switch input and an unmonitored, non-polarised opto-coupled input.

- z It can report fault, switch open and switch closed levels
- z Three visible LEDs
- z Loop powered
- z Voltage free
- z Capable of switching up to 1A at 30V
- z Built-in short circuit isolator

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	1.2mA at 24vdc
Max current	3.5mA at 24vdc
Relay contact	1A at 30vdc
Opto input	35vdc max
Monitored input voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Input/Output Unit with Isolator 55000-847-AMP



Output Unit with Isolator

The Output Unit with Isolator provides two voltage free single pole, change-over relay outputs. It is a simplified version of the Input/Output unit without circuitry for monitoring inputs.

- z Capable of switching up to 1A at 30V
- z Loop powered
- z Built-in short circuit isolator

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	1.2µA at 24vdc
Max current	3mA at 24vdc
Relay contact	1A at 30vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Output Unit with Isolator 55000-849-AMP



Switch Monitor with Isolator

The Switch Monitor with Isolator 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 Ampac compatible analogue control equipment.

- z Four input states – ‘normal’, ‘fault’, ‘pre-alarm’ and ‘alarm’
- z Two visible LEDs
- z Loop powered
- z Built-in short circuit isolator

Approvals: EN54-18/LPCB

Voltage	17-28 dc
Quiescent current	1.25mA at 24vdc
Max current	3.6mA at 24vdc
Max switching current	3A at 30vdc
Monitored input voltage	9-11 vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Switch Monitor with Isolator 55000-843-AMP



Switch Monitor Plus with Isolator

The Switch Monitor Plus with Isolator 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 Ampac compatible analogue control equipment. Additional circuitry is incorporated to monitor flow switches and provide a time delay. It can also be used to reset a beam detector.

- z Output for resetting a remote detector
- z Four input states – ‘normal’, ‘fault’, ‘pre-alarm’ and ‘alarm’
- z Two visible LEDs
- z Selectable alarm delay for monitoring flow switches – 30 seconds
- z Built-in short circuit isolator

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	1.25mA at 2 vdc
Max current	4.2mA at 24vdc
Max switching current	3A at 30vdc
Monitored input voltage	9-11 vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Switch Monitor Plus with Isolator 55000-841-AMP



Zone Monitor with Isolator

The 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.

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

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	4mA + detector load
Alarm current	11mA at 24vdc
EOL resistor value	5.1k 1/3 watt
Maximum capacitor on zone terminals	50µF
Zone voltage	19V ± 1V
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	230 grams

Discovery/XP95 Zone Monitor with Isolator 55000-845-AMP



Sounder Control Unit with Isolator

The XP95 Sounder Control Unit with Isolator is used to control the operation of a zone of conventional sounders and report their status to the control panel.

- z Allows sounders to be operated continuously or be pulsed or be pulsed, 1 second on 1 second off
- z May be synchronized when in pulsed operation

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	1.95mA at 24vdc
Loop current max	4.5mA
External supply	9-32vdc 1.25A
External quiescent current	3mA at 32vdc
External current max	47mA + load
Sounder circuit load max	1A at 30vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Sounder Control Unit with Isolator 55000-852-AMP



Three Channel Input/Output Unit with Isolator

The Three Channel Input/Output unit with Isolator provides three voltage free, single pole, change-over relay outputs, and three monitored switch inputs.

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

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	3mA at 24vdc
Max current	7.5mA at 24vdc
Relay contact	1A at 30vdc
Monitored input voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	250W x 175H x 75D mm
Weight	621 grams

Three Channel Input/Output Unit with Isolator 55000-588-AMP



Mains Switching Input/Output Unit

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

- z Supervises one or more normally-open switches connected to a single pair of cables
- z Three visible LEDs
- z Capable of switching 250 vac at up to 5 amps

Approvals: EN54-18/LPCB

Voltage	17-28vdc
Quiescent current	3.5mA at 24vdc
Rated load	5A at 240vac 2A at 48vdc
Switching capacity max	1.25kva
Switch input monitoring voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	150W x 90H x 48D mm
Weight	240 grams

Mains Switching Input/Output Unit 55000-875-AMP



DIN-Rail Input/Output Unit

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

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

Voltage	17-28vdc
Quiescent current	1.2mA at 24vdc
Max current	4.5mA at 24vdc
Relay contact	1A at 30vdc
Opto input	35vdc max
Monitored input voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Input/Output Unit 55000-803-AMP



DIN-Rail Output Unit

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

- z Capable of switching up to 30V at 1A

Voltage	17-28vdc
Quiescent current	720µA at 24vdc
Max current	3.3mA at 24vdc
Relay contact	1A at 30vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Output Unit 55000-804-AMP



DIN-Rail Switch Monitor

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 Ampac compatible analogue control equipment.

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

Voltage	17-28vdc
Quiescent current	730µA at 24vdc
Max current	5.6mA at 24vdc
Monitored input voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Switch Monitor 55000-822-AMP



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 Ampac compatible analogue control equipment. It has an output for resetting a remote detector and a selectable alarm delay making it suitable for monitoring flow switches.

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

Voltage	17-28vdc
Quiescent current	730µA at 24vdc
Max current	5.6mA at 24vdc
Opto output voltage	5-30vdc
Opto current	1mA
Monitored input voltage	9-11vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Switch Monitor Plus 55000-821-AMP



DIN-Rail Zone Monitor with Isolator

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.

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

Voltage	17-28vdc
Quiescent current	4mA + detector load
Max current	11mA at 24vdc
Relay contact	30V at 1A clean changeover
Zone voltage	19V ± 1V
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP54
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Zone Monitor with Isolator 55000-812-AMP



DIN-Rail Sounder Control Unit (5 Amps)

The DIN-Rail Sounder Control Unit (5 Amps) is used to control the operation of a zone of conventional sounders and report their status to the control panel.

- z Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off
- z May be synchronized when in pulsed operation
- z An auto-coupled input is provided to monitor the state of the external power supply
- z Sounders can be operated individually or in groups
- z Will accept a load of 5 amperes

Voltage	17-28vdc
Loop quiescent current	1.9mA at 24vdc
Loop max current	4.5mA at 24vdc
External supply	9-50vdc
External quiescent current	3mA at 32V
External max current	47mA + load
External max load	5A at 35vdc
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	95 grams

DIN-Rail Sounder Control Unit 55000-182-AMP



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.

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

Voltage	17-28vdc
Quiescent current	47µA at 24vdc
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP Rating	IP20
Size	110H x 107W x 20Dmm
Weight	90 grams

DIN-Rail Dual Isolator	55000-802-AMP
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Mini Switch Monitor

The Mini Switch Monitor is an interface within a housing that allows the unit to be fitted onto standard DIN-Rail with a twist-click motion. It monitors the state of one or more single pole volt-free contacts on a single pair of cables.

- z Designed for use where space is limited
- z Three status LEDs
- z Built-in isolator
- z Interrupt/non-interrupt
- z Pre-alarm status

Voltage	17-28vdc
Size	39W x 39H x 20D mm
Weight	30 grams

Mini Switch Monitor	55000-760-AMP
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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.

- z Allows multiple interfaces to be housed together
- z IP67

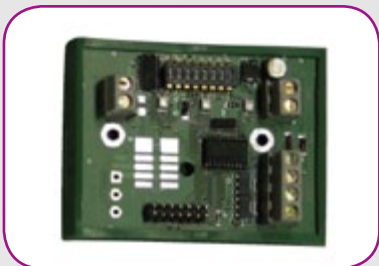
DIN-Rail Interface Enclosure – 4 interfaces	29600-239-AMP
DIN-Rail Interface Enclosure – 10 interfaces	29600-240-AMP



Single Input Device (SID)

The Single Input Device is an addressable loop device for use on the Apollo XP95 or Discovery protocol and provides a single monitored input.

- z Interfaces a switch input to an Apollo addressable loop
- z Loop powered
- z One monitored input
- z Only one address used
- z Enclosure or DIN-Rail chassis mount
- z Status indicators can be switched on and off



Voltage	17-28 VDC
Quiescent current	1.82mA at 24 VDC
Max current	2.37mA at 24 VDC
Monitored input	20k normal 500 - 15k closed
Size – enclosure	132H x 82W x 55D mm
Size – DIN chassis	77H x 57W x 40D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0 to 95% relative humidity
IP rating – enclosure	IP55
Weight – enclosure	155 grams
Weight – DIN chassis	75 grams

Single Input Device (SID) – Boxed	201-0300
Single Input Device (SID) – DIN mount	201-0350



Single Input/Output Device (SIOD)

The Single Input/Output Device is an addressable loop device for use on the Apollo XP95 or Discovery protocol and provides a single monitored input and a voltage free relay output.

- z Interfaces a switch input and a relay output to addressable loop
- z Loop powered
- z One monitored input
- z Single relay with clean changeover contact
- z Only one address used
- z Enclosure or DIN-Rail chassis mount
- z Status indicators can be switched on and off



Voltage	17-28 VDC
Quiescent current	1.74mA at 24 VDC
Max current	6.84mA at 24 VDC
Relay contact rating	1A at 24VDC clean changeover
Monitored input	20k normal 500 - 15k closed
Size – enclosure	132H x 82W x 55D mm
Size – DIN chassis	77H x 57W x 40D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0 to 95% relative humidity
IP rating – enclosure	IP55
Weight – enclosure	155 grams
Weight – DIN chassis	75 grams

Single Input/Output Device (SIOD) – Boxed	201-0301
Single Input/Output Device (SIOD) – DIN mount	201-0351



Three Input Device (3ID)

The Three Input Device is a versatile loop-powered three monitored input unit device for use on the Apollo XP95 or Discovery protocol.

- z Interfaces three switch inputs to addressable loop
- z Loop powered
- z Three monitored inputs
- z Only one address used
- z Enclosure or DIN-Rail chassis mount
- z Status indicators can be switched on and off



Voltage	17-28 VDC
Quiescent current	1.45mA at 24 VDC
Max current	3.54mA at 24 VDC
Monitored input	20k normal 500 - 15k closed
Size – enclosure	200H x 150W x 60D mm
Size – DIN chassis	98H x 72W x 40D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0 to 95% relative humidity
IP rating – enclosure	IP41
Weight – enclosure	500 grams
Weight – DIN chassis	125 grams

Three Input Device (3ID) – Boxed	201-0308
Three Input Device (3ID) – DIN mount	201-0358



Three Input/Output Device (3IOD)

The Three Input/Output Device is a versatile loop-powered unit for use on the Apollo XP95 or Discovery protocol. It provides three monitored inputs and three voltage free relay outputs.

- z Interfaces three switch inputs and three relay outputs to addressable loop
- z Loop powered
- z Three fault monitored input
- z Three relays with clean changeover contact
- z Only one address used
- z Enclosure or DIN-Rail chassis mount
- z Status indicators can be switched on and off



Voltage	17-28 VDC
Quiescent current	2.06mA at 24 VDC
Max current	19.23mA at 24 VDC
Relay contact rating	1A at 24 VDC clean changeover
Monitored input	20k normal 500 - 15k closed
Size – enclosure	200H x 150W x 60D mm
Size – DIN chassis	98H x 72W x 40D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0 to 95% relative humidity
IP rating – enclosure	IP41
Weight – enclosure	500 grams
Weight – DIN chassis	125 grams

Three Input/Output Device (3IOD) – Boxed	201-0309
Three Input/Output Device (3IOD) – DIN mount	201-0359



Three Input/Output Device (3IOD) EP

The Three Input/Output Device EP is an externally powered unit device for use on the Apollo XP95 or Discovery protocol. Using an external 24VDC power supply, each device draws a minimum amount of loop current and provides three monitored inputs and three voltage free relay outputs.

- z Interfaces three switch inputs and three relay outputs to addressable loop
- z Externally powered
- z Three fault monitored input
- z Three relays with clean changeover contact
- z Only one address used
- z Enclosure or DIN-Rail chassis mount
- z Status indicators can be switched on or off

Voltage	17-28 VDC
Quiescent current – loop	1.51mA at 24 VDC
Quiescent current – external	5.08mA at 24 VDC
Max current – loop	7.20mA at 24 VDC
Max current – external	19.55mA at 24 VDC
Relay contact rating	1A at 24 VDC clean changeover
Monitored input	20k normal 500 - 15k closed
Size – enclosure	200H x 150W x 60D mm
Size – DIN chassis	98H x 72W x 40D mm
Operating temperature	-20°C to +60°C (no icing)
Humidity	0 to 95% relative humidity
IP rating – enclosure	IP41
Weight – enclosure	500 grams
Weight – DIN chassis	125 grams

Three Input/Output Device (3IOD) EP – Boxed	201-0310
Three Input/Output Device (3IOD) EP – DIN mount	201-0360

NEW

XPander

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 not a great issue. However, certain applications do not lend themselves to this approach, such as occupied buildings, heritage sites, architecturally sensitive buildings and annexes. This is where wireless systems provide the ideal solution.

Xpander is a system in which individual detectors, call points and alarm devices 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. The Xpander range benefits from the patented XPERT technology that is used in Discovery and XP95.

- z Easy to install
- z XPERT card addressing
- z Self-monitoring
- z Proven technology
- z No special control panel needed
- z 868MHz radio channels
- z Up to 15 devices per interface
- z Up to 5 interfaces per loop

All detectors within the Xpander range are supplied complete with mounting bases.





NEW
Xpander Optical Smoke Detector and Mounting Base

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

- z Responds well to slow-burning, smouldering fires
- z Well suited for bedrooms and escape routes
- z Modified to function with the low current requirements of radio systems
- z Bi-directional (monitored) radio platform
- z Easy to install
- z Powered by two independent packs of AA alkaline batteries with a typical three year life

Approvals: EN54-7/LPCB

Voltage (regulated from radio base)	3VDC
Size inc base	100Dia x 75H mm
Operating temperature	-10°C to +50°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Weight inc base	500 grams

Xpander Optical Smoke Detector and Mounting Base XPA-CB-12034-AMP



NEW
Xpander Multisensor Detector and Mounting Base

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

- z Sensitive to a wide range of fires
- z Well suited for environments such as hotel bedrooms
- z Modified to function with the low current requirements of radio systems
- z Bi-directional (monitored) radio platform
- z Easy to install
- z Powered by two independent packs of AA alkaline batteries with a typical three year life

Approvals: EN54-7/LPCB

Voltage (regulated from radio base)	3VDC
Size inc base	105Dia x 80H mm
Operating temperature	-10°C to +50°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Weight inc base	500 grams

Xpander Optical Smoke Detector and Mounting Base XPA-CB-13032-AMP



NEW
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 (AIR) which has a fixed upper limit, but in addition, measures the rate of increase in temperature.

- z Can be used in applications where smoke detectors are unsuitable
- z Ideal environments that are dirty or smokey under normal conditions
- z CS detectors are ideal for use in environments with rapid temperature fluctuations such as boiler rooms
- z Modified to function with the low current requirements of radio systems
- z Bi-directional (monitored) radio platform
- z Easy to install
- z Powered by two independent packs of AA alkaline batteries with a typical three year life

Approvals: EN54-5/LPCB

Voltage (regulated from radio base)	3VDC
Size inc base	105Dia x 80H mm
Operating temperature	-10°C to +50°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Weight inc base	400 grams

Xpander Heat Detector and Mounting Base	
Rate-of-Rise (AIR)	XPA-CB-11170-AMP
Static (CS)	XPA-CB-11171-AMP



NEW
Xpander Manual Call Point

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

- z Uses patented XPERT addressing
- z Resettable element
- z Reports an alarm in under one second

Approvals: EN54-11/LPCB

Voltage (regulated from radio base)	3VDC
Size inc back box	89H x 93W x 70D mm
Operating temperature	-10°C to +50°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight inc base	151 grams

Xpander Manual Call Point	XPA-MC-14006-AMP
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NEW

Xpander Sounder and Sounder Base

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

- z Wall mounted
- z Wireless – eliminates cable problems
- z Self test feature
- z Output is between 92 and 106dB(A) at 1m dependent on tone setting

Voltage	3VDC
Alarm tones (selectable)	32
IP rating	IP21C
Sound output	100dB(A)

Xpander Sounder and Sounder Base (Red)	XPA-CB-14001-AMP
Xpander Sounder and Sounder Base (White)	XPA-CB-14002-AMP



NEW

Xpander Sounder Beacon and Sounder Base

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

- z Wall mounted
- z Eliminates cable problems
- z Enables DDA compliance
- z Self test feature

Voltage	3VDC
Alarm tones (selectable)	32
IP rating	IP21C
Sound output	100dB(A)

Xpander Sounder Beacon (Red) and Base (Red)	XPA-CB-14003-AMP
Xpander Sounder Beacon (Amber) and Base (White)	XPA-CB-14004-AMP
Xpander Sounder Beacon (Clear) and Base (White)	XPA-CB-14005-AMP



NEW
Xpander Loop Interface Unit

The Xpander Loop Interface Unit communicates between the intelligent control panel and the Xpander detectors as the detectors alone can't communicate directly with the panel.

- z Connect up to 15 Xpander devices to a XP95 loop
- z Translates radio signals from Xpander detectors to the control panel
- z Incorporates an integral loop isolator and is polarity sensitive
- z Loop powered
- z Integral LCD display provides status of wireless devices

Voltage	24VDC
Alarm current	15mA at 24 VDC
Size inc back box	185H x 130W x 45D mm
Operating temperature	-10°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
Weight	1100 grams

Xpander Interface Unit	XPA-IN-14007-AMP
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NEW
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.

- z Tests for radio signal strength

Xpander Survey Tool	XPA-MC-14010-AMP
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NEW
Xpander Aerials

There are two aerials to complement the Xpander range

- z Xpander External Aerial is used to strengthen the radio signals sent between the Xpander Interface Unit and Xpander devices
- z Xpander External Directional Aerial is used to pick up radio signals from outbuildings and annexes

Xpander External Aerial	XPA-MC-14008-AMP
Xpander External Directional Aerial	XPA-MC-14009-AMP

Audio Visual Signalling

Ampac offers a wide range of Intelligent Audio Visual (AV) signalling devices for use in conjunction with its range of intelligent and conventional detectors and control panels. A versatile and functional range offering a huge choice for any application.

- z Sounder Bases combine an alarm sounder and detector base
- z Beacon Bases combine an alarm beacon and detector base
- z Sounder Beacon Bases combine an alarm sounder, beacon and detector base
- z Sounders are used to provide an audible indication of an alarm
- z Beacons are used to provide an visual flashing indication of an alarm
- z Sounder/Beacons are used to provide an audible and flashing indication of an alarm





Integrated Sounder Base

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

- z Two volume ranges – 55-75dB and 75-91dB
- z Synchronisation of ‘alert’ and ‘evacuate’ tones
- z Individual and group addressing
- z Unique acoustic self-test
- z Integrated base
- z Isolator option

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	1.2mA
Max current (sounder operated)	5mA
Max sounder output	83dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21D
Size	115Dia x 38H mm
Weight	140 grams

Integrated Base Sounder	45681-278-AMP
Integrated Base Sounder with Isolator	45681-277-AMP
Red Cap	45681-293-AMP
White Cap	45681-292-AMP



Ancillary Sounder Base

The Ancillary Sounder Base 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.

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

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	100µA
Max current (sounder operated)	3mA
Max sounder output	85dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Size	115Dia x 38H mm
Weight	140 grams

Ancillary Base Sounder	45681-276-AMP
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Loop-Powered Beacon Base

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

- z Beacon flash rate of once per second
- z Synchronisation of beacon flash
- z Individual and group addressing
- z Unique beacon self-test
- z Isolator option

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	300µA
Max current	3.1mA
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21D
Size	115Dia x 31H mm
Weight	109 grams

Beacon Base with Isolator	45681-333-AMP
Beacon Base	45681-335-AMP
Red Cap	45681-293-AMP
White Cap	45681-292-AMP



Sounder Beacon Base

The Sounder Beacon Base is a loop-powered sounder and beacon combined with a standard Intelligent Mounting Base. It is used to signal a fire alarm in enclosed areas. The Sounder Beacon Base can be used either with a detector fitted or with a cap for operation as a stand-alone alarm device.

- z Two volume ranges 55-75dB(A) and 75-91dB(A)
- z Beacon flash rate of once per second
- z Synchronisation of 'alert' and 'evacuate' tones
- z Synchronisation of beacon flash
- z Individual and group addressing
- z Unique acoustic and beacon self test
- z Enables DDA compliance

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	300µA
Max current (sounder operated)	8mA
Max sounder output	91dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21D
Size	115Dia x 38H mm
Weight	160 grams

Sounder Beacon Base	45681-331-AMP
Sounder Beacon Base with Isolater	45681-330-AMP



Discovery Sounder Beacon Base

The Discovery Sounder Beacon Base is a multi-functional device comprising a mounting base for Discovery fire detectors, a sounder, a beacon and a short circuit isolator. It makes full use of the Discovery protocol and for ease of commissioning a 'magnetic wand' can be used to test and adjust each sounder locally.

- z Set individual control of the sounder and beacon
- z Select volume and tone settings from the control panel
- z Tones can be used for purposes in addition to fire – ideal for schools
- z Soft start option – ideal for hospitals and nursing homes
- z Electronic bell tone

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	350µA
Max current (sounder operated)	8mA
Max sounder output	90dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21D
Size	115Dia x 31H mm
Weight	160 grams

Discovery Sounder Beacon Base	45681-393-AMP
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Intelligent 100dB(A) Open Area Sounder

The Intelligent 100dB(A) Open Area Sounder is designed for use in open areas and can be connected to any Discovery or XP95 system.

- z Output is 100dB (A) at 90°
- z Current consumption of 5.0mA
- z Can be synchronised
- z Group address facility
- z Loop powered
- z Wall mounted

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	1.2mA
Max current (sounder operated)	5mA
Max sounder output	100dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21C
Size	105L x 105W x 95H mm
Weight	215 grams

Loop Powered Sounder (Red)	45681-278-AMP
Loop Powered Sounder (White)	45681-279-AMP



Intelligent Weatherproof 100dB(A) Open Area Sounder

The Intelligent Weatherproof 100dB(A) 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.

- z IP 66 (immune to the affects of wind and precipitation)
- z Output is 100dB (A) at 90°
- z Current consumption of 5.0mA
- z Can be synchronised
- z Group address facility
- z Loop powered
- z Wall mounted

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	1.2mA
Max current (sounder operated)	5mA
Max sounder output	100dB(A)
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP66
Size	110L x 110W x 113H mm
Weight	340 grams

Weatherproof Loop-Powered Sounder (Red)	45681-274-AMP
Weatherproof Loop-Powered Sounder (White)	45681-275-AMP



NEW
Intelligent Open-Area Sounder (Sonos)

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

- z Self-test fault monitoring
- z Choice of tones
- z Group addressing and synchronisation of alarm
- z Weatherproof IP65
- z Comes with Isolating Base as standard
- z Loop powered

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	333µA
Max current (sounder operated)	5mA
Max sounder output	100dB(A)
Operating temperature	-10°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP65
Size	104Dia x 95.5H mm
Weight	225 grams

Intelligent Open Area Sounder (Red) Sonos	55000-001-AMP
Intelligent Open Area Sounder (White) Sonos	55000-002-AMP



Loop-Powered Beacon

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

- z High intensity LED – more reliable than xenon beacons
- z Automatic LED check
- z Lockable
- z Wide angle of visibility
- z Enables DDA compliance
- z Synchronised flash
- z Can be used with Discovery or XP95

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	150µA
Max current (beacon operated)	3mA
Flash rate	1Hz
Operating temperature	-20°C to +60°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP23D
Size	115Dia x 38H mm
Weight	140 grams

Loop-Powered Beacon (Red)	55000-877-AMP
Loop-Powered Beacon (Clear Lens/Red Flash)	55000-878-AMP
Loop-Powered Beacon (Amber)	55000-879-AMP



NEW Intelligent Open-Area Beacon (Sonos)

The Intelligent Open-Area Beacon has been developed for use in situations where there is a risk that sounders will not be heard. It is weatherproof and can be used outside.

- z Self-test fault monitoring
- z Weatherproof IP65
- z Group addressing
- z Synchronisation of alarm
- z Comes with Isolating Base as standard
- z Loop powered

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	333µA
Max current (beacon operated)	3.1mA
Flash rate	1Hz
Operating temperature	-10°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP65
Size	104Dia x 97.5H mm
Weight	205 grams

Intelligent Open Area Beacon (Red) Sonos	55000-009-AMP
Intelligent Open Area Beacon (Clear) Sonos	55000-010-AMP



Multi-Tone Open-Area Sounder Beacon

The Multi-Tone Open-Area Sounder Beacon is designed for use in indoor open areas and can be connected to any Discovery or XP95 system. The sounder beacon complements Apollo's open area integrated base sounders as well as the intelligent 100dB(A) open area sounder.

- z Powerful LED combined with 100dB sound output
- z Two volume settings
- z Synchronisation of 'alert' and 'evacuate' tones
- z Individual and group addressing
- z Three tone choices
- z Enables DDA compliance

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	333µA
Max current (sounder/beacon operated)	9mA
Max sounder output	100dB(A)
Flash rate	1Hz
Operating temperature	-10°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP21C
Size	105L x 105W x 50H mm
Weight	209 grams

Multi-Tone Open-Area Sounder Beacon (Red) with Isolator	55000-293-AMP
Multi-Tone Open-Area Sounder Beacon (White) with Isolator	55000-294-AMP



Weatherproof Multi-Tone Open-Area Sounder Beacon

The Weatherproof Multi-Tone Open-Area Sounder Beacon is designed for use in outdoor open areas and can be connected to any Discovery or XP95 system. The sounder beacon complements Apollo's intelligent and integrated base sounders as well as the loop powered 100dB sounder.

- z IP66 (immune to the affects of wind and precipitation)
- z Powerful LED combined with 100dB sound output
- z Two volume settings
- z Synchronisation of 'alert' and 'evacuate' tones
- z Individual and group addressing
- z Three tone choices
- z Enables DDA compliance

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	333µA
Max current (sounder/beacon operated)	9mA
Max sounder output	100dB(A)
Flash rate	1Hz
Operating temperature	-20°C to +70°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP66
Size	110L x 110W x 113H mm
Weight	294 grams

Weatherproof Multi-Tone Open-Area Sounder Beacon (Red) with Isolator	55000-298-AMP
Weatherproof Multi-Tone Open-Area Sounder Beacon (White) with Isolator	55000-299-AMP



NEW
Intelligent Open-Area Sounder Beacon

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

- z Gives two functions at one point
- z Self-test fault monitoring
- z Choice of tones
- z Group addressing and synchronisation of alarm
- z Comes with Isolating Base as standard
- z Loop powered

Approvals: LPCB EN54-3/LPCB

Voltage (polarity sensitive)	17-28 VDC
Quiescent current	333µA
Max current (sounder/beacon operated)	8mA
Max sounder output	100dB(A)
Flash rate	1Hz
Operating temperature	-10°C to +55°C (no icing)
Relative humidity	0 to 95% (non condensing)
IP rating	IP65
Size	104Dia x 97.5H mm
Weight	260 grams

Intelligent Open Area Sounder Beacon (Red) Sonos	55000-005-AMP
Intelligent Open Area Sounder Beacon (Clear) Sonos	55000-006-AMP



Fire Alarm Bell 150mm

- z Motorised mechanism
- z Low current consumption
- z Red finish with FIRE lettering
- z Suitable for indoor use
- z Back box available – 206-0006

Voltage	24 VDC
Operating current	25mA
Size (without back box)	150Dia x 56D mm
Sound Level	92 dB @ 3m
Operating temperature	-10°C to +55°C (no icing)
Weight	764 grams

Bell 150mm	206-0012
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Fire Alarm Bell 200mm

- z Red finish with FIRE lettering
- z Solenoid actuating mechanism
- z Suitable for indoor use
- z Back box available – 206-0006

Voltage	19-27 VDC
Operating current	100mA
Size (without back box)	200Dia x 70D mm
Sound Level	85 dB @ 3m
Operating temperature	-20°C to +70°C (no icing)
Weight	1.25kg

Bell 200mm 24Vdc	206-0001
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Bell Back Box

- z Allows surface mounting of bell
- z Screw thread conduit entry and protection for wiring terminals
- z Red finish
- z Weather seal

Material	Aluminium cast
Finish	Red
Depth	40 mm
Weight	270 grams

Bell Back Box for 206-0012 and 206-0001	206-0006
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ASL-30 Xenon Beacon/Strobe

- z Red, amber, or blue lens options
- z Compact size
- z ABS/polycarbonate/acrylic construction
- z Easy-fit BESA, junction box adaptor/mounting base

Voltage	20 to 28 VDC
Current (at 24 VDC)	1W 42mA 3W 135mA, 5W 155mA
Size inc base	77Dia x 65H mm
Flash rate	60 per minute
Operating temperature	-30°C to + 70°C
IP rating	IP65
Weight inc base	106 grams

ASL-30 Strobe 24Vdc Red 1 Watt	208-0030
ASL-30 Strobe 24Vdc Red 3 Watt	208-0032
ASL-30 Strobe 24Vdc Red 5 Watt	208-0033
ASL-30 Strobe 24Vdc Amber 1 Watt	208-0034
ASL-30 Strobe 24Vdc Amber 3 Watt	208-0036
ASL-30 Strobe 24Vdc Amber 5 Watt	208-0037
ASL-30 Strobe 24Vdc Blue 1 Watt	208-0038
ASL-30 Strobe 24Vdc Blue 3 Watt	208-0040
ASL-30 Strobe 24Vdc Blue 5 Watt	208-0041
ASL-30 Strobe Adapter Plate	208-0024



Fire Alarm Remote Indicator – Round

- z Detector activation indicator
- z 5mm Red LED
- z Compact size
- z Modern styling
- z For conventional or analogue detectors
- z Choice of legend

Voltage	24 VDC
Current at 24v	1.5mA
Size	74Dia x 16H mm
Weight	26 grams

Remote Indicator – Blank	209-0001
Remote Indicator – Fire Alarm in Concealed Space	209-0004
Remote Indicator – Fire Alarm in Roof Space	209-0005
Remote Indicator – Fire Alarm in Room	209-0006
Remote Indicator – Fire Alarm in Duct	209-0007
Remote Indicator – Fire Alarm in Cupboard	209-0008
Remote Indicator – Fire Alarm	209-0020
Remote Indicator – Detector Activated	209-0023



Fire Alarm Flashing Indicator/Buzzer with Mute

- z Alarm activation indicator and buzzer
- z 10mm red flashing LED
- z Buzzer with mute facility
- z Modern styling

Voltage	24 VDC
Current at 24v	43mA
LED flash rate	45 per minute
Buzzer	3.8kHz @ 114dBA
Size (UK single gang plate)	86H x 86W x 5D mm
Weight	89 grams

Flashing Indicator/Buzzer with Mute Switch	209-0022
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Roshni Sounder

The Roshni Low Profile (RoLP) is the fire alarm markets leading conventional alarm sounder. The wide operating voltage and range of tones available to the user make this flexible sounder supremely adaptable in even its most basic forms.

- z High sound output
- z Low current consumption
- z 32 tones (user selectable)
- z Automatic synchronisation
- z Volume control
- z Second tone for two stage alarms
- z Lockable base
- z Suitable for outdoor use (deep and 'U' base only)

Approvals: EN54-3/LPCB

Voltage	9 - 28Vdc
Current	16mA (Typical Tone 3)
Sound Output	102dB(A) (Typical Tone 3)
Tones	32
Volume Control	20dB
Monitoring	Reverse polarity
Temperature	-25°C to +70°C
Protection	IP54 (shallow base) IP65 (deep/'U' base)
Construction	ABS
Size	93mm Dia x 63mm H (shallow base) 93mm Dia x 93mm H (deep base)
Weight	0.25Kg

Roshni Sounder, red, shallow base	ROLP/R/S
Roshni Sounder, red, deep base	ROLP/R/DB
Roshni Sounder, red, deep 'U' base	ROLP/R/U

110/230 VAC versions available on request



Squashni G3

The third generation Squashni G3 amalgamates the best features of the Squashni and Squashni Micro into a single sounder. The large flat surface allows the mounting of most popular European detectors, while the high efficiency and low operating current permit compatibility with many systems. A combined audible and visual version is also available.

- z Fixing platform for most popular detectors
- z Low current consumption
- z Tamper proof cap for standalone use (supplied separately)
- z First fix base for easier installation
- z Combined sounder & beacon version available
- z Led triggered option available

Voltage	18 - 28Vdc
Current	4/5mA
Sound Output	90dB(A)
Tones	8
Volume Control	10dB
Monitoring	Reverse polarity
Temperature	-10°C to +55°C
Protection	IP21C
Construction	ABS
Size	114mm Dia x 35mm H
Weight	0.16Kg
Colours	White

Squashni Ceiling Base Sounder	SQ/G3/W
Blanking Cover/Cap (Pack of 5)	SQ/G3/CAP



Solista LED Beacon

LED beacons are available to complement audible alarms for use in areas where people may be present who have impaired hearing or areas with high ambient noise levels. LED technology offers a greatly reduced current consumption compared to Xenon types making them ideal for use with fire panels with restricted sounder circuit current capacity.

- z Ultra low current – LED technology
- z High reliability
- z Long service life
- z Locking base
- z Compact size

Voltage	10 - 30Vdc
Current	3m - 5mA (user selectable)
Light Output	>0.5Cd or 1Cd (user selectable)
Flash Rate	0.5Hz / 1Hz (user selectable)
Monitoring	Reverse polarity
Temperature	-10°C to +55°C
Protection	IP21C (shallow base) IP33C (deep base)
Construction	ABS, PC lens
Size	93mm Dia x 53mm H (shallow base) 93mm Dia x 83mm H (deep/U base)
Weight	0.1Kg

Solista LED Beacon, shallow base	SOL/RL/R/S
Solista LED Beacon, deep base	SOL/RL/RD
Solista LED Beacon, 'U' base	SOL/RL/RU

110/230 VAC versions available on request



RoLP Solista Sounder/LED Beacon

The use of beacons to supplement audible alarms is becoming increasingly common. A combined sounder beacon allows both an audible and visual alarm to be provided but requires only a single installation point. LED beacons have a dramatically lower current consumption than that of traditional xenon beacons making them ideal for applications where sounder circuit capacity is limited.

- z Ultra low current – LED technology
- z Sounder & beacon with a single installation point
- z Unobtrusive low profile design
- z Standard Fulleon base simplifies system upgrades
- z Lockable base

Voltage	9 - 28Vdc
Current	19mA (Typical Tone 3)
Sound Output	101dB(A) (Typical Tone 3)
Tones	32
Light Output	> 0.5Cd
Flash Rate	1Hz
Volume Control	20dB
Monitoring	Reverse polarity
Temperature	-10°C to +54°C
Protection	IP54 (shallow base) IP65 (deep base)
Construction	ABS, PC lens
Size	93mm Dia x 78mm H (shallow base) 93mm Dia x 110mm H (deep/U base)
Weight	0.3Kg

RoLP Solista Sounder/LED Beacon, shallow base	ROLPSB/RL/R/S
RoLP Solista Sounder/LED Beacon, deep base	ROLPSB/RL/RD

110/230 VAC versions available on request



KAC Indoor Manual Call Point

The KAC Indoor Manual Call Point can be configured as either a break glass or resettable unit by simply changing from one element to another. No other additional parts or alternative products need to be ordered.

All MCP indoor call point products also help preserve the integrity of the overall system as illegal removal of the product lid will result in the call point operating and the system going into alarm.

Full compliance with the latest standards is essential and the new MCP indoor call point range is fully approved to the latest EN54-11 standard. The MCP1B product version allows for connection to 'Savwire' systems.



- z Unique 'Plug & Play' installation concept
- z Total 'Flex-Ability' in the choice of operating element
- z Anti-Tamper facility
- z Enhanced aesthetics
- z Fully approved to the latest standards
- z Backward compatibility

Approvals: EN54-11/LPCB

Voltage	30 VDC
Contact rating (switch only)	2 Amps – 30 VDC
Resistor	470Ω
Operating temperature	-10°C to +55°C
Humidity	0-95% (no condensation)
IP rating	IP24D
Size (flush mount)	93H x 89W x 27.5D mm
Size (surface mount)	93H x 89W x 59.5D mm
Weight (flush mount)	110 grams
Weight (surface mount)	160 grams

Indoor MCP, red, surface, glass element	MCP1A-R470SG-01
Indoor MCP, red, surface, resettable flexible element	MCP1A-R470SF-01
Indoor MCP, red, flush, glass element	MCP1A-R470FG-01
Indoor MCP, red, flush, resettable flexible element	MCP1A-R470FF-01
Indoor MCP, yellow, surface, glass element	MCP1A-Y470SG-11
Indoor MCP, Savwire, red, surface, glass element	MCP1B-R470SG-01
Indoor MCP, Savwire, red, surface, resettable flexible element	MCP1B-R470SF-01
Indoor MCP, Savwire, red, flush, glass element	MCP1B-R470FG-01
Indoor MCP, Savwire, red, flush, resettable flexible element	MCP1B-R470FF-01



KAC Outdoor Manual Call Point

The outdoor WCP is an IP67 sealed manual call point product. The enhanced environmental protection allows the unit to be installed in many external environments where water and dirt are likely to be present, making it a true waterproof and outdoor product.

- z Sealed to IP67
- z Unique 'Plug & Play' installation concept
- z Total 'Flex-Ability' in the choice of operating element
- z Anti-Tamper facility
- z Enhanced aesthetics and compact design
- z Fully approved to the latest standards

Approvals: EN54-11/LPCB

Voltage	30 VDC
Contact rating (switch only)	2 Amps – 30 VDC
Resistor	470Ω
Operating temperature	-30°C to +70°C
Humidity	0-95% (no condensation)
IP rating	IP67
Size	93H x 97.5W x 71D mm
Weight	240 grams

Outdoor MCP, red, surface, glass element	WCP1A-R470SG-K13-01
Outdoor MCP, red, surface, resettable flexible element	WCP1A-R470SF-K13-01
Outdoor MCP, yellow, surface, glass element	WCP1A-Y470SG-K13-11
Outdoor MCP, Sawwire, red, surface, break glass element	WCP1B-R470SG-K13-01

KAC Outdoor Manual Call Point Accessories

- z Spare or replacement call point test key
- z Transparent protective cover
- z Replaceable flexible or glass elements

Flexible Element for Resettable Call Points	PS210
Universal Transparent Hinged Cover	PS200
Universal Test Key for KAC Call Points – Pack of 10	SC070
Glass Elements – Pack of 10	KG1 x10



Sonos Sounder

A general purpose electronic sounder for fire, security and industrial applications.. Deep base units have weatherproof protection to IP65 and can be used in all locations both indoors and outdoors.

- z Simple `First Fix` installation – TimeSaver base
- z Smooth flow cabling for faster installation
- z Quick connect/disconnect
- z Tone and volume can be preset or adjusted off-base
- z Weatherproof to IP65 (deep base units)
- z Synchronised alarm tones

Approvals: EN54-3/LPCB

Audibility at 1m (tone dependent)	Up to 106dB (A)
Tones	32
Voltage	9-60V DC
Current (tone dependent)	4-41mA
IP Rating	IP65 (deep base)
Operating temperature	-25°C to +70°C
Weight	215 grams (shallow base) 250 grams (deep base)

Red Sonos Sounder, shallow base	18-980450-AMP
Red Sonos Sounder, deep base	18-980451-AMP
White Sonos Sounder, shallow base	18-980475-AMP
White Sonos Sounder, deep base	18-980476-AMP



Sonos LED Beacon

A general purpose beacon for fire, security and industrial applications. Deep base units have weatherproof protection to IP65 and can be used in all locations both indoors and outdoors. The Sonos Beacon utilises a full faced, translucent case which provides a much larger lens area and a greater spread of light.

- z Simple `First Fix` installation – TimeSaver base
- z Weatherproof to IP65 (deep base units)
- z High efficiency LED beacon consumes less than 5mA
- z Low current LED beacon as standard

Voltage	17-60V DC
Current	5mA
IP Rating	IP65 (deep base)
Operating temperature	-25°C to +70°C
Weight	215 grams (shallow base) 250 grams (deep base)

Red Lens Sonos LED Beacon, red shallow base	18-980507-AMP
Red Lens Sonos LED Beacon, red deep base	18-980508-AMP
Clear Lens Sonos Red LED Beacon, white shallow base	18-980609-AMP
Clear Lens Sonos Red LED Beacon, white deep base	18-980610-AMP



Sonos Sounder Beacon

A general purpose electronic sounder beacon for fire, security and industrial applications. Deep base units have weatherproof protection to IP65 and can be used in all locations both indoors and outdoors. A full faced, translucent sounder case rather than a separate add-on beacon gives a much larger lens area and a greater spread of light.

- z Simple `First Fix` installation – TimeSaver base
- z Quick connect/disconnect
- z Tone and volume can be preset or adjusted off-base
- z Weatherproof to IP65 (deep base units)
- z Low current LED beacon
- z Sounder and beacon can be controlled separately

Approvals: EN54-3/LPCB

Audibility at 1m (tone dependent)	Up to 106dB (A)
Tones	32
Voltage	17-60V DC
Current	4-45mA (sounder) 5mA (beacon)
IP Rating	IP65 (deep base)
Operating temperature	-25°C to +70°C
Weight	215 grams (shallow base) 250 grams (deep base)

Red Lens Sonos LED Beacon, shallow base	18-980500-AMP
Red Lens Sonos LED Beacon, deep base	18-980501-AMP
Clear Lens Sonos LED Beacon, shallow base, red LEDs	18-980607-AMP
Clear Lens Sonos LED Beacon, deep base, red LEDs	18-980608-AMP



Sonos Universal Sounder Base / Sounder Beacon Base

The Sonos Universal Base Sounder Base and Sounder Beacon Base are low profile units. Their prime application is to be installed under proprietary smoke and heat detectors to provide both detection and alarm at the same point, reducing wiring and installation costs.

- z Two large cable entries for quick and simple installation
- z Keyhole fixing points for ease of installation
- z Designed to complement a variety of detectors
- z Volume control for maximum flexibility
- z Cover plate available for use as a sounder or sounder beacon only
- z Unique beacon design for optimised light coverage

Approvals: EN54-3/LPCB

Audibility at 1m (tone dependent)	Up to 95dB (A)
Voltage	17-60V DC
Tones	32
Current	2-8mA
Operating temperature	-10°C to +55°C
Weight	100 grams

Universal Base Sounder – white	18-980532-AMP
Universal Base Sounder – cream	18-980533-AMP
Universal Base Sounder LED Beacon – white	18-980682-AMP
Universal Base Sounder LED Beacon – cream	18-980685-AMP
Base Sounder Cover – white	18-980560-AMP
Base Sounder Cover – cream	18-980564-AMP





SINGAPORE

Twilight Vision Pte Ltd

1 Yishun Street
23 #04-50 YS-ONE
Singapore 768441

Telephone:

+65 6752 7335

Fax:

+65 6481 0046

Email:

enquiry@twilightvision.com.sg

Web:

www.twilightvision.com.sg

Contact:

Vincent Chan

MALAYSIA

Demiplex Sdn Bhd

No 56 Jalan BP 5/11
Bandar Bukit Puchong
Malaysia 47100

Telephone:

+603 8060 2121

Fax:

+603 8068 2525

Web:

www.demiplex.com

Contact:

Timothy Kang

HEAD OFFICE – PERTH

Ampac Technologies Pty Ltd

7 Ledger Road, Balcatta, Western Australia, 6021

Telephone: +618 9201 6100

Fax: +618 9201 6101

Email: info@ampac.net

Web: www.ampac.net

As part of Ampac's commitment to continuous improvement, specifications may change without notice.

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