

AMPAC

ADVANCED WARNING

SYSTEMS

Special Applications E-Catalogue

WORLD LEADER OF INNOVATIVE SOLUTIONS IN FIRE DETECTION AND ALARM SYSTEMS



Ampac Technologies is the largest independent and privately owned manufacturer and supplier of fire detection and alarm systems in Australia.

Ampac specialises in the research & development, design, manufacturing, marketing and distribution for a complete range of system solutions. We supply systems for a vast variety of applications including commercial and industrial buildings, mines, prisons, hospitals, hotels and multi-residential complexes.

Ampac operates Australia-wide through a network of branch offices. These offices provide sales and technical support for fire installation & EWIS contractors as well as fire discipline and electrical consulting engineers. We also work with building owners and maintenance engineers to make recommendations for future planning or budgeting.

Since its inception in 1974, Ampac has grown to become a thriving global operation with a focus on quality and exceptional customer service and support. Our passion for growing our business through the relationships we have with our customers is one that energises us. It fuels our desire to make better products, implement more efficient systems, grow our network of operations and develop our people.

Ampac Technologies is ISO 9001 accredited locally and also holds overseas approvals with LPCB & UL for other key global markets.

Ampac's comprehensive range of products enables us to deliver complete solutions for fire detection and alarm systems of any size for any customer. Indeed, developing unparalleled customer partnerships drives our desire to be 'World leaders of Innovative Solutions in Fire Detection and Alarm Systems'.

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Orbis

Marine Conventional Detectors

Orbis Marine conventional fire detectors offer a wealth of features to save time, enhance reliability and reduce false alarms within the marine environment. These include drift compensation and DirtAlert, a feature that warns service engineers via a flashing yellow LED that detectors need maintenance; and patented FasTest, a procedure that takes just four seconds to test smoke detectors and confirm that they are functioning correctly.

- z Approved for use in marine environments
- z Modern, low profile design
- z TimeSaver Base for fast installation
- z Transient rejection for false alarm reduction
- z High humidity tolerance up to 98%RH
- z Wide operating temperature -40°C to +70°C





Orbis Marine Optical Smoke Detector

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

- 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 incidents 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 Marine Optical Smoke Detector ORB-OP-42001-MAR



Orbis Marine Multisensor Detector

The Orbis Marine 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 Marine Multisensor Detector ORB-OP-43001-MAR



Orbis Marine Heat Detector

The Orbis Marine Heat Detector uses a single thermistor to sense the air temperature around the detector. There are six classes of heat detectors in the Orbis Marine 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 incidences of false alarms
- z Increased reliability of detection

Approvals: EN54-5/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 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 Marine Heat Detector

Orbis Marine A1R Heat Detector- Rate of Rise	ORB-HT-41001-MAR
Orbis Marine A2S Heat Detector- Static	ORB-HT-41002-MAR
Orbis Marine BR Heat Detector- Rate of Rise	ORB-HT-41003-MAR
Orbis Marine BS Heat Detector- Static	ORB-HT-41004-MAR
Orbis Marine CR Heat Detector- Rate of Rise	ORB-HT-41005-MAR
Orbis Marine CS Heat Detector- Static	ORB-HT-41006-MAR



Orbis Marine TimeSaver Base

The Orbis Marine TimeSaver Base is a completely new design that provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure.

- 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

Approvals: EN54/LPCB

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

Orbis Marine TimeSaver Base	ORB-MB-00001-MAR
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Orbis IS

Intrinsically Safe Conventional Detectors

Orbis IS is a range of conventional detectors which have been developed from the standard Orbis smoke and heat detectors. Orbis IS is a range with modern styling and is electronically compatible with Apollo Series 60 intrinsically safe conventional detectors. Orbis IS is a demonstration of Apollo's commitment to the market for high quality conventional detectors for use in small to medium size installations. In developing this range, Apollo has put ease of installation and reliability in daily operation at the forefront of considerations.

- z TimeSaver Base
- z Patented FasTest enabling functional testing in four seconds
- z DirtAlert indicates limit of drift compensation
- z Tolerates extreme operating conditions: -40°C to +70°C
- z False alarm reduction
- z Flashing LED option





Orbis I.S. Optical Smoke Detector

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

- z Reduces false alarms
- z Recommended for early warning of fire in most areas
- z Improved sensitivity to black smoke
- z Compensation for slow changes in sensitivity
- z Algorithms for reliability of alarm

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 I.S. Optical Smoke Detector ORB-OP-52027-APO



Orbis I.S. Multisensor Detector

The Orbis I.S. 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 Reduces false alarms
- z Sensitive to fast burning, flaming fires
- z Improved sensitivity to black smoke
- z Compensation for slow changes in sensitivity
- z Algorithms for reliability of alarm

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 I.S. Multisensor Detector ORB-OH-53027-APO

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



Orbis I.S. Heat Detector

The Orbis IS 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 IS 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 incidences of false alarms
- z Increased reliability of detection

Approvals: EN54-5/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 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 I.S. Heat Detector	
Orbis I.S. A1R Heat Detector- Rate of Rise	ORB-HT-51145-APO
Orbis I.S. A1S Heat Detector- Static	ORB-HT-51157-APO
Orbis I.S. A2S Heat Detector- Static	ORB-HT-51147-APO
Orbis I.S. BR Heat Detector- Rate of Rise	ORB-HT-51149-APO
Orbis I.S. BS Heat Detector- Static	ORB-HT-51151-APO
Orbis I.S. CR Heat Detector- Rate of Rise	ORB-HT-51153-APO
Orbis I.S. CS Heat Detector- Static	ORB-HT-51155-APO

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



Orbis I.S. TimeSaver Base

The Orbis IS 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 Detector locking mechanism

Approvals: EN54/LPCB

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

Orbis I.S. TimeSaver Base	ORB-MB-50018-APO
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Conventional Galvanic Barrier

The Conventional Galvanic Barrier is installed in the safe area and ensures system integrity

- z Ideal for conventional hazardous areas
- z Enables compliance with the ATEX directive

Approvals: EN54-5/LPCB

Conventional Galvanic Barrier	29600-378
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Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



DIN-Rail Interface Enclosures

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

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

XP95 IS DIN Rail Interface Enclosure (4 units)

29600-239

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.

XP95 IS

Intrinsically Safe Intelligent Detectors

XP95 Intrinsically Safe (IS) detectors are a development of the well established intelligent XP95 range from Apollo. XP95 IS detectors feature all the benefits of the standard range, but are developed specifically for use in hazardous areas. The addresses of XP95 IS detectors are set by means of the patented XPERT card.





XP95 I.S. Ionisation Smoke Detector

The XP95 I.S. 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 Detects super heating and flaming combustibles
- z Dual chamber technology
- z Wind resistant smoke inlets
- z Transient voltage protection
- z Fine gauze insect protection
- z Lockable security fitting
- z Must be connected to a suitable safety barrier and protocol translator

Approvals:



Voltage	14-22 VDC
Quiescent current	} Current is dependant on the type of safety barrier used
Alarm current	
Remote o/p current	
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +40°C
Humidity	0 to 95% relative humidity
IP rating	IP43
Weight inc base	161 grams

XP95 I.S. Ionisation Smoke Detector 55000-540APO



XP95 I.S. Optical Smoke Detector

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

- 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 Must be connected to a suitable safety barrier and protocol translator

Approvals:



Voltage	14-22 VDC
Quiescent current	} Current is dependant on the type of safety barrier used
Alarm current	
Remote o/p current	
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +40°C
Humidity	0 to 95% relative humidity
IP rating	IP43
Weight inc base	157 grams

XP95 I.S. Optical Smoke Detector 55000-640APO

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



XP95 I.S. Heat Detector

The XP95 I.S. Heat Detector operates by measuring heat levels with a single thermistor network which gives a count 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 fitting
- z Must be connected to a suitable safety barrier and protocol translator

Approvals: EN54-5/LPCB



Voltage	14-22 VDC
Quiescent current	} Current is dependant on the type of safety barrier used
Alarm current	
Remote o/p current	
Size inc base	100Dia x 50H mm
Operating temperature	-20°C to +40°C
Humidity	0 to 95% relative humidity
IP rating	IP53
Weight inc base	157 grams

XP95 I.S. Heat Detector	55000-440APO
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XP95 I.S. Mounting Base

The XP95 I.S. Mounting Base has been designed to accept only IS products. This ensures that standard detectors cannot inadvertently be fitted into an intrinsically safe system. XPERT cards are supplied with all bases.

- z Wide cable entry
- z Contains no electronic parts
- z “One way only’ fit”
- z Low insertion force
- z Large terminations
- z Lockable security fitting
- z White finish
- z Must be connected to a suitable safety barrier and protocol translator

Approvals:

Size	100Dia x 8H mm
Operating temperature	-20°C to +40°C
Humidity	0 to 95% relative humidity
Weight	55 grams

XP95 I.S. Mounting Base	45681-215APO
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Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



XP95 I.S. Manual Call Point – Standard

The XP95 I.S. Manual Call Point is based on the standard waterproof model. It features an 'interrupt' facility to provide fast response to an alarm.

- z Waterproof
- z Red alarm LED
- z Wide cable entry
- z Large terminations
- z Manual Call Points must be connected to a suitable safety barrier and protocol translator

Approvals: ATEX E Ex ia IIc T5 and EN54-11



Voltage	}	}	14-22 VDC
Quiescent current			Current is dependant
Alarm current			on the type of safety barrier used
Size inc base			124H x 124W x 60D mm
Operating temperature			0°C to +40°C
Humidity			0 to 95% relative humidity
IP rating			IP67
Weight inc base			400 grams

XP95 I.S. Manual Call Point – Standard Red No Flap 55100-940APO

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.



DIN-Rail Interface Enclosures

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

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

XP95 DIN Rail Interface Enclosure (4 units)	29600-239
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XP95 I.S. Protocol Translator and Galvanic Barrier

The Protocol Translator and Galvanic Barrier are installed in the safe area ensuring integrity of communication between control equipment and field devices and safety within the limits of BASEEFA approvals.

- z Enables IS detectors to be connected to a standard loop driver
- z Loop powered
- z DIN-Rail mounting
- z Maximum of 20 XP95 IS devices per channel
- z Translators must be connected to detectors via a suitable safety barrier

Approvals:



Voltage	19-28 VDC
Size	110H x 20W x 92.5D mm
Operating temperature	-20°C to +60°C
Humidity	0 to 95% relative humidity
Weight	100 grams

XP95 I.S. Protocol Translator	
XP95 Single Channel Protocol Translator	55000-855APO
XP95 Dual Channel Protocol Translator	55000-856APO
XP95 I.S. Galvanic Barrier	29600-098

Please check www.apollo-fire.co.uk on a regular basis for up-to-date approvals information.

Flame Detectors

Specialist Intelligent Detectors

Flame detectors are effective in protecting areas where flaming fires may be expected. There is a choice of detection techniques - Ultra Violet and Infra-red, or a combination of both. UV Flame Detectors are generally used in engine rooms, factories and warehouse applications. Infra-red Flame Detectors are able to tolerate dirtier environments which may block UV radiation and are generally used in applications such as waste handling, colour printing and paper manufacturing.

- z Detects a wide range of open fires
- z Insensitive to wind
- z Transient voltage protection
- z Three types of detector
- z Lockable security fitting
- z White finish





Intelligent Base Mounted UV Flame Detector

The Intelligent Base Mounted UV Flame Detector is designed to protect internal areas where open fires may be expected. The detector has a single UV sensor with a narrow spectral response in order to discriminate between flames and most spurious sources of radiation.

- z Responds to stationary flames with no flicker
- z Sensitive to UV radiation emitted by flames during combustion
- z Compact flame detector which can fit into Discovery or XP95 bases
- z Loop-powered
- z Increased reliability of detection

Approvals: IP66

Operating voltage	17-28 V DC
Quiescent current	2.3mA
Alarm current	4.2mA
Field of view	90° Cone
Operating temperature	-40°C to +70°C (no condensing or icing)
Relative humidity	95% non-condensing
IP rating	IP66
Housing	White Polycarbonate, V-0 rated to UL94

XP95 Base Mounted UV Flame Detector	55000-022APO
Bracket for Base Mounted Flame Detectors	29600-458



Intelligent Base Mounted UV IR² Flame Detector

The Intelligent Base Mounted UV IR² Flame Detector is designed to protect areas where open flaming fires may be expected. The detector has a UV and dual IR sensors responding to different wavelengths in order to discriminate between flames and spurious sources of radiation.

- z Responds to stationary flames with no flicker
- z Sensitive to UV and low-frequency flickering IR radiation emitted by flames during combustion
- z Compact flame detector which can fit into Discovery or XP95 bases
- z Loop-powered
- z False alarms due to electrical discharges from lightning or arc welding and flickering sunlight are minimised

Approvals: IP66

Operating voltage	17-28 V DC
Quiescent current	2.8mA
Alarm current	4.2mA
Field of view	90° Cone
Operating temperature	-40°C to +70°C (no condensing or icing)
Relative humidity	95% non-condensing
IP rating	IP66
Housing	White Polycarbonate, V-0 rated to UL94

XP95 Base Mounted UV IR ² Flame Detector	55000-023APO
Bracket for Base Mounted Flame Detectors	29600-458



Intelligent Base Mounted IR³ Flame Detector

The Intelligent Base Mounted IR³ Flame Detector is designed to protect areas where open flaming fires may be expected. The detector has three IR sensors that respond to different IR wavelengths in order to discriminate between flames and spurious sources of radiation.

- z Responds to stationary flames with no flicker
- z Sensitive to low-frequency flickering IR radiation emitted by flames during combustion
- z Compact flame detector which can fit into Discovery or XP95 bases
- z Loop-powered
- z False alarms due to factors such as flickering sunlight are avoided by a combination of filters and signal processing techniques

Approvals: IP66

Operating voltage	17-28 V DC
Quiescent current	2.5mA
Alarm current	4.2mA
Field of view	90° Cone
Operating temperature	-40°C to +70°C (no condensing or icing)
Relative humidity	95% non-condensing
IP rating	IP66
Housing	White Polycarbonate, V-0 rated to UL94

XP95 Flameproof IR ³ Flame Detector	55000-024APO
Bracket for Base Mounted Flame Detector	29600-458



Intelligent Dual IR Flame Detector

The Intelligent Dual Infra-Red (IR²) Flame Detector is designed for use in areas where flaming fires may be expected. The detector has two sensors which respond to different IR wavelengths to discriminate between flames and spurious sources of radiation. Applications include aircraft hangars, coal handling and paper manufacturing plants and woodworking environments.

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

Approvals:

- Operating voltage
- Quiescent current
- Alarm current
- Remote output
- Size
- Operating temperature
- Relative humidity
- IP rating
- Weight

XP95 Dual IR ² Flame Detector	55000-280APO
XP95 Flameproof IR ² Flame Detector	55000-295APO



Intelligent Triple IR Flame Detector

The Intelligent Triple IR Flame Detector (IR³) is designed to protect areas where open flaming fires may be expected. It is sensitive to low frequency, flickering infra-red radiation emitted by flames during combustion.

- z Loop-powered
- z Sensitive to flickering IR radiation
- z Detects through films of oil, dust, water and ice
- z Responds to flickering flames, including those invisible to the naked eye
- z False alarms due to lighting or flickering sunlight are minimised
- z Compatible with Discovery and XP95 protocols

Approvals:

- Operating voltage
- Quiescent current
- Alarm current
- Remote output
- Size
- Operating temperature
- Relative humidity
- IP rating
- Weight

XP95 Triple IR ³ Flame Detector	55000-020APO
XP95 Flameproof IR ³ Flame Detector	55000-021APO



Flame Detector Bracket

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

- z Allows flame detector to be moved to desired position

Flame Detector Bracket	29600-203
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Base Mounted Flame Detector Bracket

The Flame Detector Bracket is an optional accessory for the Intelligent Flame Detectors. It is a stainless steel mounting bracket adjustable in two axis.

- z Allows flame detector to be moved to desired position

Bracket for Base Mounted Flame Detectors	29600-458
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Note: this Item Code is for the bracket only. See page 84 for mounting box choices.



Flame Detector Weather Shield

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

- z Protects against water ingress
- z Protects sensor from direct sunlight

S/Steel Weather Shield for Standard Flame Detector	29600-206
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Deckhead Mounting Boxes

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

- z Protects against water ingress
- z Improved performance
- z Available in polycarbonate or metal
- z Polycarbonate Deckhead Mounting Box 45681-217 also fits Apollo Audio Visual bases

Deckhead Mounting Box	45681-217APO
Metal Deckhead Mounting Box with PG16 Access Ports	29600-131
Metal Deckhead Mounting Box with M20 Access Ports	29600-139
Deckhead Adaptor (for use with 29600-196 - converts cable glands from PG16 to M20)	27249-005



Detector Base – Mounting Block

- z The mounting block is recommended for use when detectors are installed on uneven surfaces
- z The mounting block ensures the correct fit with the base and the detector, improves reliability and ensures that the mounting tags on the base are not over tightened
- z Used with Base Mounted Flame Detector

Size	100Dia x 28H mm
Weight	35 grams

Detector Base Mounting Block	45681-204APO
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FastSense High Sensitivity Detection System

FastSense is an aspirating system that adopts laser technology making it extremely sensitive, thus providing the earliest warning to the slightest traces of smoke. FastSense is available in 3 models: FastSense 25, FastSense 100, FastSense PLUS. The FastSense 25 accommodates sampling pipe up to 25 metres in length while the FastSense 100 and FastSense PLUS has total sampling pipe capacity of 100 metres and 200 metres respectively.

All FastSense detectors incorporate the patented artificial intelligence software ClassiFire. ClassiFire continually monitors the environment and internal contamination, then adjusts the sensitivity of the detector for optimum performance. The FastLearn feature is automatically initiated on power up facilitating quick set-up on commissioning.

FastSense detectors when networked can be programmed from a single nominated point and when used in conjunction with an Apollo Protocol Interface Card, provides control and indication at the Ampac FireFinder Fire Alarm Control Panel. Up to 126 detectors can be installed on a network data bus. A Remote Display Unit (RDU) provides bar-graph and smoke density status indication of its associated detector. It is installed on a FastSense network data bus.

A FastSense PLUS detector fitted with a command module will offer the single point programming function of a networked system. FastSense 25 and FastSense100 are both supplied with an easy to install docking station. The docking station is available with or without the pipe exhaust port.

A range of sampling pipes and fittings complement the FastSense detector.



FastSense

High Sensitivity Detection System

- z Advanced Laser Technology
- z ClassiFire Artificial Intelligence software
- z Patented 'Wastegate' system
- z In-built bar-graph and smoke level display; and programming (Available only with the FastSense PLUS)
- z Apollo Protocol Interface Card Interface (APIC) provides portal for indication and control of FastSense detectors at Ampac's FireFinder Fire Alarm Control Panel
- z PC based remote software
- z Remote Display Unit (RDU)
- z SenseNet graphical display and control
- z FastSense Matrix system
- z PipeCalculator installation design software
- z Extensive range of fittings





FastSense 25



FastSense 100



FastSense PLUS

FASTSENSE Models	25	100	PLUS
Voltage	27 VDC	27 VDC	27 VDC
Quiescent current	250mA	400mA	400mA

Dimensions (mm)			
Height	215	220	372
Width	140	300	427
Depth	85	90	95

Relay Outputs (All normally open 1 Amp)			
Fire 1	Optional	Optional	Fitted
Fire 2	Optional	Optional	Fitted
Pre-Alarm	Optional	Optional	Fitted
Auxiliary	Optional	Optional	Fitted
Fault	Optional	Optional	Fitted

No. of Pipe Inlets	1	2	4
Max. Pipe Length	25m	100m	200m
Sensitivity Range			
Minimum	25%	25%	25%
Maximum	0.03%	0.03%	0.03%
Data Bus	1.2km	1.2km	1.2km
IP Rating	IP50	IP50	IP50
Operating temperature	-10°C to +60°C		
Humidity	0 to 90% non-condensing		
Weight	1.7kg	3.8kg	5.2kg

Approvals	AS1603.8
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FastSense 25 detector & docking station	230-0001
FastSense 100 detector & docking station	230-0002
FastSense PLUS detector	230-0011
FastSense PLUS detector + command module	230-0012



FastSense Apollo Protocol Interface Card

- z The Apollo Protocol Interface Card (APIC) provides the interface between the FastSense detector and the Ampac FireFinder Fire Alarm Control Panel (FACP)
- z Only one (1) APIC is required in a stand-alone or networked FastSense configuration
- z Up to 126 networked FastSense detectors can be interfaced with the FACP through the use of the APIC. The operator has control; and can interrogate the status of each detector
- z Two (2) sets of 8-way DIP switches provide the facilities for correct addressing
- z Power to the APIC is derived from the host FastSense detector via interconnecting ribbon cable

FastSense Apollo Protocol Interface Card	230-0041
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FastSense Air Heater Box

- z The FastSense Air Heater Box should be used in applications where the ambient temperature is below 0° centigrade
- z The air heater box warms the sampled air before it arrives to the FastSense detector thus minimising the problems with surface condensation and ensuring components are operating within the specified temperature tolerances

Voltage	230 VAC
Quiescent current	1 Amp
Dimension	265H x 138W x 160D mm
Weight	3.2 kg

FastSense Air Heater Box	230-0042
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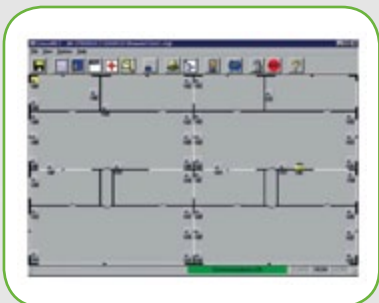


FastSense Wire Burn / Overload Unit

- z The Wire Burn / Overload Unit is used to provide a consistent method of testing the FastSense detector
- z Special wire (230-0045) should be used inconjunction with the Wire Burn / Overload Unit to ensure consistent smoke source when testing the FastSense detector

Voltage	230 VAC
Quiescent current	1 Amp
Dimension	115H x 145W x 22D mm
Weight	4 kg

FastSense Wire Burn / Overload Unit	230-0044
FastSense 100m Wire for Burn / Overload Unit	230-0045



SenseNet

SenseNET is a Windows based program that provides central management and monitoring of up to 126 detectors.

The computer running the SenseNET program can communicate with a network of FastSense detectors, via a SenseNET control unit or Command Module.

While the SenseNET control unit is an external desk-top stand-alone device that provides the interface between the computer and the network of FastSense detectors, the Command Module is normally installed in a specific FastSense detector. This nominated FastSense detector will also be featured with a larger LCD display to facilitate menu navigation.

The SenseNET graphics displays maps, produces warning sounds and spoken instruction message which may be unique to each detector. Detectors may be grouped together in zones, and represented by a zone map thus allowing alarms and faults to be quickly and easily located.

SenseNET has the ability to scan all detectors on the communications bus and read configuration settings. This feature is called SiteScan™. To facilitate installation and commissioning global changes may be executed over the SenseNET communications bus.

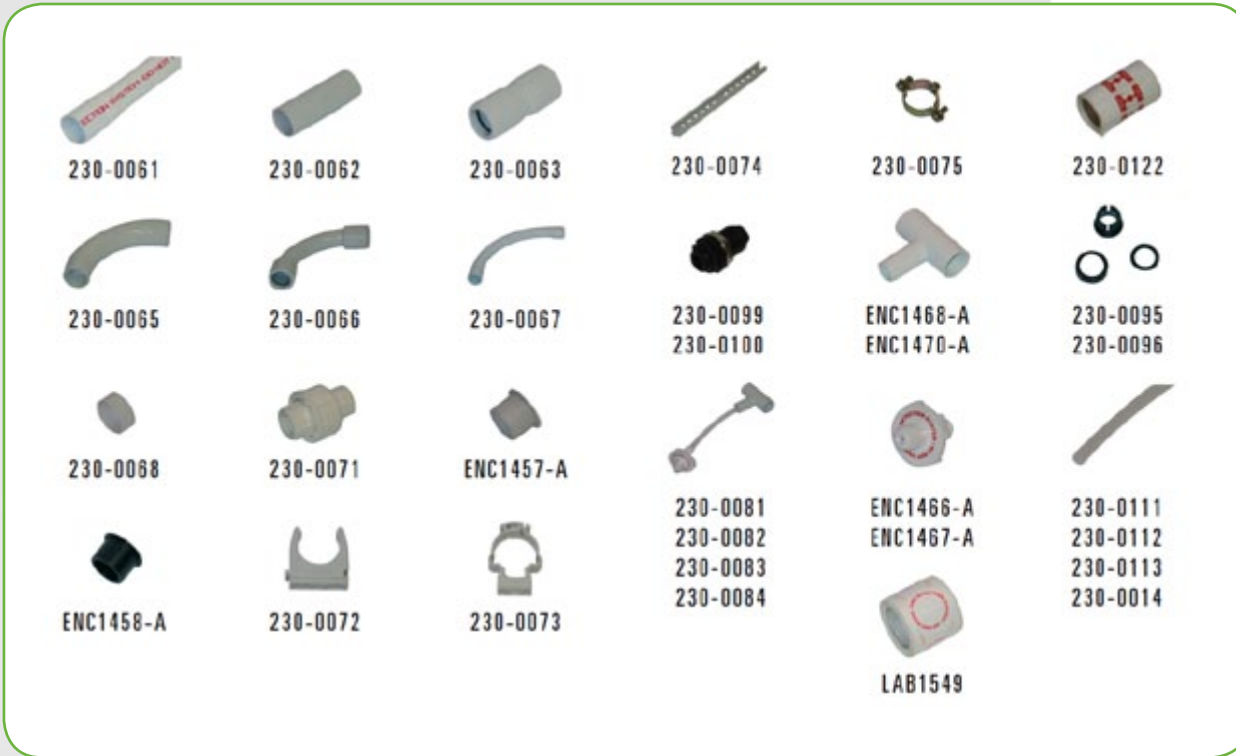
Detector to detector communication uses standard RS485 protocol. Maximum distance between detectors is 1.2 kilometres.



The proprietary SenseNET operates on a dedicated communications bus. Apart from the Control Unit and Command Module, other devices can also operate and communicate on this communications bus. These devices include:

1. **Contact Monitor** – Ideal for alarm and fault status of third party products to be monitored. The Contact Monitor can accommodate four (4) alarm, fault and two (2) additional inputs.
2. **Remote Display Unit (RDU)** – The bar graph (10 levels) and smoke levels (6 levels expressed as obscuration/ metre) of a FastSense detector can be remotely displayed using the RDU. Fire, Pre-Alarm, Auxiliary and Fault status are also displayed.

SenseNET control unit c/w power supply	230-0031
SenseNET contact monitor	230-0032
SenseNET software CD + dongle	230-0033
SenseNET Remote Display Unit 19" board	230-0034
SenseNET Remote Display relay board	230-0035
SenseNET single RDU wall enclosure	230-0036



Fittings

The FastSense™ detectors are complemented by a range of light grey fittings intended to ensure that the system will suit most applications. 'The Clever Alternative' extends beyond the detectors and includes fittings with unique features. These features include:

- z Pipes, printed with red markings, have 'bell' ends for easy fit to the next pipe, thus saving time and material (less need for coupling for pipe joins).
- z T-piece is available with friction or lock fitting.
- z The friction fit sampling points are aesthetically designed and have an easy fit 'finger twist' lock nut.
- z Resilient snap-on conduit saddle clips and collars, are a boon for installers.
- z Sampling kits are available with either friction or locking T-piece and also includes a one (1) metre sampling tube and sampling point.
- z Sampling pipe plug available for extending sampling point whilst being unobtrusive.



Fittings

FastSense Grey Fittings – 25mm

Pipe (4 metre length)	230-0061
Pipe coupling – standard	230-0062
Pipe coupling IP65 "Press Fit"	230-0063
Small 90° bend – standard	230-0065
Small 90° bend IP65 "Press Fit"	230-0066
Large 90° bend – standard	230-0067
End cap 25mm	230-0068
Sleeve adaptor 27– 25mm Grey FastSense25/100	ENC1457-A
Sleeve adaptor 27–25mm Black FastSense PLUS	ENC1458-A
Solvent Cement – 250mL	230-0088
Pipe clip - saddle type	230-0072
Pipe clip - collar type	230-0073
Pipe clip mounting rail (fits up to 4 pipes)	230-0074
Pipe clip - metal ring with 6mm thread	230-0099
Pipe clip stand off support – M8 x 60mm stud	230-0100
Sampling Hole Pipe Labels – 200 per roll	230-0081

Sampling Point Kits

Sampling Point Kit 10mm – friction fit	230-0081
Sampling Point Kit 10mm – locking	230-0082
Sampling Point Kit 8mm - friction fit	230-0083
Sampling Point Kit 8mm - locking	230-0084

Sampling Point Fittings

Sampling Point T Piece (friction fit) -10mm tube	ENC1468-A
Lock Fitting for ENC1468-A – 10mm tube	230-0096
Sampling Point T Piece (friction fit) - 8mm tube	ENC1470-A
Lock Fitting for ENC1470-A – 8mm tube	230-0095
Tube – 10mm (1 metre length) natural	230-0111
Tube – 10mm (100 metre roll) natural	230-0112
Tube – 8mm (1 metre length) natural	230-0113
Tube – 8mm (100 metre roll) natural	230-0114
Sampling Point Head (friction fit) - 10mm tube	ENC1466-A
Sampling Point Head (friction fit) - 8mm tube	ENC1467-A
Sampling Point Labels "Red"	LAB1549
Sampling Point Bulkhead Fitting - 10mm tube	230-0099
Sampling Point Bulkhead Fitting - 8mm tube	230-0100
Sampling Point Plug for Bulkhead Fitting	ENC1451-A
Sampling Point Plug - 10mm tube	ENC1452-A
Sampling Point Plug - 8mm tube	ENC1453-A



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

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