FIRE ALARM AND EXTINGUISHING SYSTEMS

GENERAL CATALOGUE

inim
ELECTRONICS

Inim fire detection systems protect spaces from fire and explosion hazards, providing high accuracy in detection, alarm signaling, extinction and evacuation from the building. The wide range of available control panels can provide systems for all sizes and requirements. By means of the use of Emergency Lighting, Inim devices are able to obtain an integrated system, even more powerful.

Index

Made
in Inim.
Made
in Italy.

The energy of an Italian company
in continuous evolution.
The innovation of intrusion, fire and
home automation systems made
in Italy and appreciated throughout
the world. The quality of fully certified
products, easy to install and even
easier to use. The security that
should surrounds us.

Technologies

INIM is continuously active in the search for forward thinking solutions to the everyday challenges faced by installer companies. In pursuance of this quest, INIM's R & D professionals are always looking to push the known boundaries of technology toward a totally new class of products with unmatched capabilities. Every INIM device is designed to take full advantage of state-of-the-art microcontroller technology, network architecture and communication infrastructures.

The following pages allow you to take a glimpse at the technologies developed at INIM's laboratories and catch sight of the future of fire detection, today.

OpenLoop

OpenLoop technology is the result of intense work carried out by the R&D staff at INIM Electronics. In fact, this technology can manage different brands of field devices without need of any intervention on the control panel hardware. This kind of approach is the most innovative available in the fire detection market. The loop is, in fact, "open" and ready to manage devices of different brands without requiring any changes or add-ons to the standard control panel. With OpenLoop technology it is possible for different-brand devices to coexist on the same control panel as long as they are connected to different loops. This technology is present in the SmartLight, SmartLoop and Previdia analogue series control panels. The performance of OpenLoop technology is enhanced when used in conjunction with the Versa++ and LoopMap technologies built into in INIM's ENEA analogue detector series.

HorNet e HorNet+

A network based on "HorNet" or "HorNet+" technology represents the state-of-the-art of RS485 embedded systems. The architecture of such networks provides a "fault-tolerant" system, in other words, a system that is capable of configuring itself during fault conditions in such a way as to ensure the integrity of communications between the system control panels at all times.

The "HorNet" and "HorNet+" architectures manage real-time information exchange between control panels and by so doing allow complex cause-effect matrices to be created. "HorNet" technology is used in SmartLoop series control panels, while "HorNet+" technology is used in the Previdia series control panels.

Janus

Janus technology allows you to interface the INIM world with the world outside through an Ethernet connection and TCP/IP protocol. By adding the TCP-IP modules based on Janus technology (SmartLAN and IFMLAN) the system becomes accessible and controllable (with the appropriate security levels) through any PC or SmartPhone connected to the Internet. It will be possible to interact with all the control panels in the network, in fact, the SmartLAN and IFMLAN modules act as gateways capable of interconnecting each element of the Hornet or Hornet+ network to the outside world. In addition to the extended global reach of the system, SmartLAN and IFMLAN also allow you to send e-mails and UDP and TCP/IP protocol packets as well as allowing you to program all the control panels connected in the network from remote locations.

Emergency 54

An INIM system equipped with Emergency54 technology provides the highest degree of reliability an installer can expect from any fire detection system. Thanks to the sophisticated multi-processor architecture, this device, even in the remote possibility of a CPU fault, allows the activation of alarm signalling in the event of fire. Emergency54 operates both at control panel level to ensure the activation of alarm signalling also in the presence of a main CPU fault and at the network level by allowing remote control panels to activate alarms also when the malfunctioning unit is part of a network. The functions of the Emergency54 also extend to communication procedures, in fact the remote communicator modules of Inim control panels are all based on autonomous microcontrollers capable of operating properly even when the main CPU fails. Emergency54 technology is used in the SmartLoop and Previdia series control panels.

Versa++

Inim has launched a whole new concept into the world of conventional detection: flexibility. In fact, as a result of the revolutionary Versa++ technology incorporated in the IRIS and ENEA detector ranges, you can now configure individual detectors to suit their specific environments. You can also connect to the detector line for a complete diagnosis of each individual detector and thus test its operating capacity, verify real-time values, view the contamination level in the optical smoke chamber and change the sensitivity and operating mode. Each detector has a non-volatile memory which allows you to view the smoke and temperature levels measured in the period prior to the last alarm detected. Versa++ gives you the true feel of the future of fire detection.

LoopMap

LoopMap technology is so new that it seems to have come out of the latest video-game. It is the apex of loop technology. Once the loop is connected to the control panel or loop pilot, you simply start the enrolling process via your computer to obtain the loop layout containing all details and any secondary branches, in the order in which the wiring was completed. LoopMap is capable of recognizing the wiring order of the loop devices even when the loop has branches. LoopMap technology allows you to reconstruct the exact installation topology and obtain an easy-to-use, interactive loop-layout map which greatly simplifies and speeds up searches relating to faults and maintenance work.

Inim Cloud Fire

All PREVIDIA series control panels can be connected to the Inim Electronics Cloud Fire. The Cloud service for fire detection and alarm systems is completely free of charge and provides two profiles, Installer and User, both of which can control systems remotely thus overcoming any networking problems and making all systems accessible from any location.

Moreover, the Cloud fire allows you to keep your systems log continuously updated, as required by law, in fact all the events recorded by the control panel (to which notes can be added and signed), such as maintenance, tests and any relevant events encountered by the system operators (entered manually) are saved automatically. Additionally, the Cloud fire records in detail the tests performed on each individual detector and provides an archive of test reports which can be consulted both by the installer and the user. It also provides automatic diagnostic reports capable of indicating whether the periodic maintenance operations on each single element of the system have been performed and by so doing allows the installer to plan his work efficiently and the user to verify the actual maintenance status of the system.

PREVIDIA
ADDRESSABLE ANALOGUE DETECTION

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FIRE ALARM AND EXTINGUISHING SYSTEMS

The Previdia series
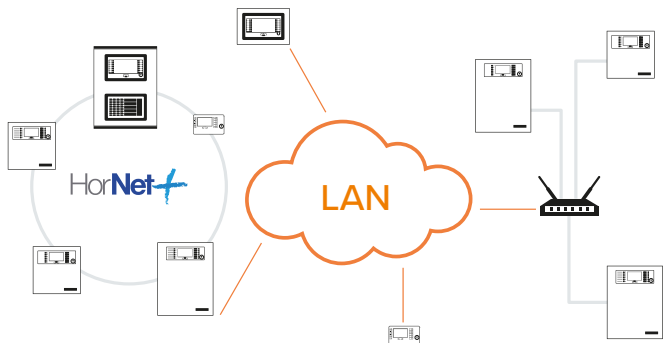
PREVIDIA|MAX

PREVIDIA|COMPACT

The analogue control panels in the Previdia Compact series are the ideal solution for small to medium-sized installations, they pack into a compact cabinet the innovative features of the Previdia Max system with a one-of-a-kind simplicity of use. Programming via the user-friendly touchscreen interface with its clear and intuitive layout is designed to minimize system activation and maintenance times, making Previdia Compact the ideal choice.

Networking

All the control panels can be interconnected together in a network through RS-485 based connections (HORNET+ technology) or over TCP-IP networks: this allows the delocalized management of the entire system and achieves greater flexibility on the site of installation and greater overall reliability.

HorNet+

LAN

Extinction

All models manage gas shutdown systems; the control panels manage both multiple discharge zones from a single control panel (Previdia Max up to 24 channels) and the use of delocalized control panels capable of managing a single flood zone (Previdia Compact), however, interconnected together in the network.
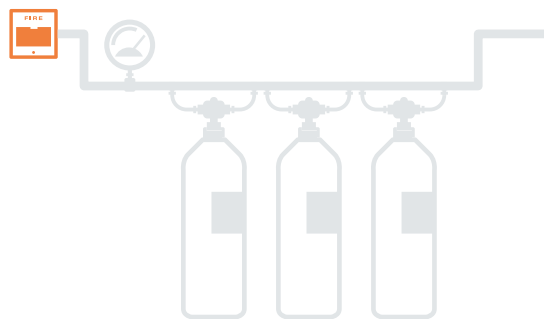
Remote Control

As a result of the management of the latest technology, such as TCP-IP, 3G, Wired telephone lines, WEB etc., systems based on control panels from the Previdia range can be remotely supervised with ease and ensure complete danger management in every situation.

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inim Cloudfire

Certificazioni

Certifications are a fundamental aspect of automatic fire detection and extinguishing systems, both in consideration of their field of use, which is crucial for the safety of building occupants, and of mandatory regulations. This is why the Previdia Compact system has obtained all the necessary certificates from the IMQ in compliance with all the applicable standards:

EN54-2	Control and Indicating Equipment.
EN54-4	Power supply units.
EN54-21	Alarm transmission and fault warning routing equipment.
EN12094-1	Components for gas extinguishing systems - electrical automatic control and delay devices.
EN54-13	Compatibility of system components.

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Cert. No. 911k   EN 12094-1

Previdia Max

PREVIDIA|MAX

Previdia is a modular system for the realization of fire detection and extinguishment systems. Previdia control panels can comprise a single cabinet or several cabinets (max. 4) assembled together. The control panels can be used individually or interconnected in a network, the network connection can be achieved through an RS485 BUS, via a TCP-IP connection or by means of a combination of both.

Certifications

In automated detection and fire extinguishing systems, in view of their essential role in public safety and, of course, all mandatory requirements, certifications are an essential aspect. That is why the Previdia Max system has obtained all the necessary certificates from the most prestigious European institute in the field of fire prevention: LPCB.

Additionally, to provide peace of mind to installers, system designers and end-users, the certificates were obtained in compliance with all applicable standards:

EN54-2	Control and Indicating Equipment.
EN54-4	Power supply units.
EN54-21	Alarm transmission and fault warning routing equipment.
EN12094-1	Components for gas extinguishing systems - electrical automatic control and delay devices.
EN54-13	Compatibility of system components.

This means that in addition to the standard certifications required for fire detection systems, Previdia Max has obtained further certification – in regard to exclusive functions and features - uncommon in the sector and that place it in a dominant position at the top of the market.

The evolution of fire detection systems

Highly simplified

Thanks to its graphic colour touchscreen, Previdia simplifies configuration, management and maintenance of the system and makes almost effortless what was until today time consuming and complicated.

Highly intuitive

Thanks to innovative concepts such as the graphic-map feature which provides instant location of danger, and video verification that uses IP cameras to provide real-time images of the exact point of an alarm, Previdia drastically reduces response times during moments of real danger and greatly reduces the false alarm rate.
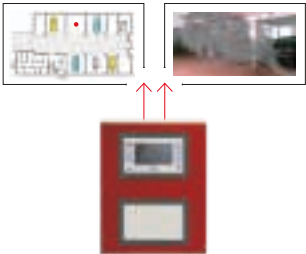
Highly flexible

Thanks to its modular architecture, Previdia offers a system that is suitable for all types of installations, from small business premises to large airports, hotels and shopping malls. The use of completely functional modules offers optimized protection to the electronic components and allows the addition of those specific functions installations so often require. Each control panel can be made up of a minimum of one cabinet to a maximum as four and is capable of managing up to 32 IFM modules.

Highly intelligent

Thanks to a distributed-intelligence structure which uses a microprocessor inside each module, redundant microprocessors in the main unit and the possibility of having a backup CPU, Previdia guarantees unmatched reliability. The security of the system is no longer entrusted to a single processing unit but to a group of interconnected CPUs which operate in synergy to provide the fastest and most effective response.

Highly articulated

Thanks to its powerful network architecture, Previdia allows the realization of hybrid systems based on connections using bights, fiber optics and TCP-IP networks capable of overcoming all barriers and of reaching unprecedented cover. Each cluster of control panels interconnected through a Hornet+ network can support up to 48 control panels, and up to 20 clusters can be connected through a TCP/IP network.

TCP-IP

HorNet+   HorNet+
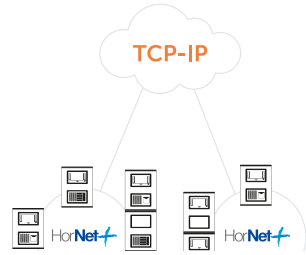
Highly robust

Thanks to HOT SWAP technology modules can be added or replaced without shutting down the system, thus providing Previdia with a fast, safe method of intervention without any services interruptions.
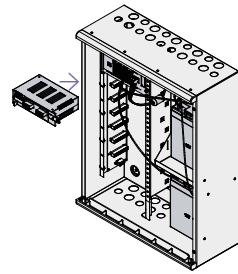
Highly reliable

Thanks to loop control modules equipped with "power up boosters", Previdia allows you to set the operating voltage of each separate cable thus ensuring reliability and wiring simplicity.
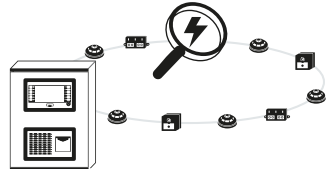
Highly multimedial

Thanks to the intensive use of new technologies such as the Web Server, electronic mail, TCP-IP connections, telephone and GSM communications, Previdia provides a system that is always under control and in reach. Both for the end-user and maintenance personnel.

Analogue detection

PREVIDIA MAX
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The system

CAN DRIVE

Single cabinet control panel

If the Previdia system consists of a single cabinet with a primary CPU unit (crucial for system functioning), it will be possible to install on front door a second module, selected from the following list.

FPMNUL	Plastic support with no functions.
FPMLED	Signalling module with 50 individually programmable tri-colour LEDs.
FPMLEDPRN	Signalling module with 50 individually programmable tri-colour LEDs and an 80mm printer.
FPMEXT	Extinguishment channel status module, to be used when the control panel is equipped with IFMEXT modules for the management of automatic extinguishment systems.
FPMCPU	CPU module (identical to the primary unit) configured as a secondary CPU unit. In the event of fault on the primary CPU unit it will take over thus making 100% of the functions on the primary CPU redundant.

The cabinet has a CAN DRIVE for the interconnection of a maximum of 8 IFM modules. In accordance with the needs of the system, the following modules are available.

IFM24160 (Max 4)	Power supply module.
IFM2L (Max 8)	Module for the management of two ring circuits for devices distributed in the protected area, commonly referred to as a LOOP.
IFM4R (Max 16)	4 Programmable relay module.
IFM4IO (Max 16)	4 supervised power Input/Output module.
IFMDIAL (Max 1)	PSTN and GSM line dialler module.
IFM16IO (Max 4)	Module 16 inputs/outputs at low power.
IFMNET (Max 1)	Control panel to Hornet+ network connection module.
IFMLAN (Max 1)	Advanced TCP-IP service management module (Video verification, Web Interface Web, electronic mail etc.)
IFMEXT (Max 24)	Gas extinguishment-system management module.

The first position at the top of the CAN DRIVE bar is for the IFM24160 power supply module (essential for the proper functioning of the control panel). The remaining 7 connectors can be used for the connection of any of previously mentioned modules (the maximum number at the side of each module refers to applications with several cabinets).

Multi-cabinet control panels

Several cabinets (Max. 4) can be joined together in order to form an increased-sized cabinet and expand the capacity of a control panel. The cabinets can be assembled together using the supplied mounting screws and once assembled the CAN DRIVE bars can be connected together by means of the suppled wire. The assembled cabinets provide respective number of housings for the frontplate and CAN DRIVE bar modules. Each cabinet can house a IFM24160 power-supply module. A control panel with more than one IFM24160 power-supply module is capable of managing a current equal to the sum of the maximum currents of its power-supply modules. The power-supply modules will share the load current automatically.
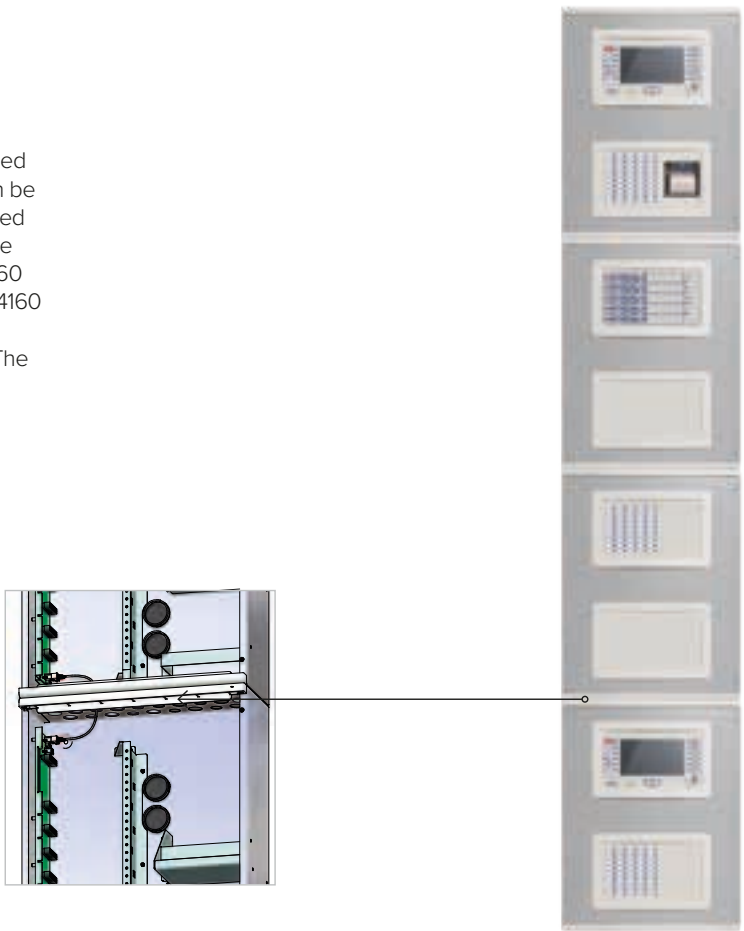
Control panel network
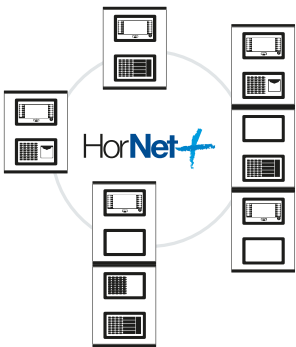
Control panel in a Hornet network+

The system can be expanded by simply connecting other control panels (maximum 48) in such a way as to constitute a system with increased capacity (Hornet+ network). In order to connect two or more control panels in a Hornet+ network, it is necessary to install an IFMNET module in each control panel, this module provides two RS485 ports for the ring connection.
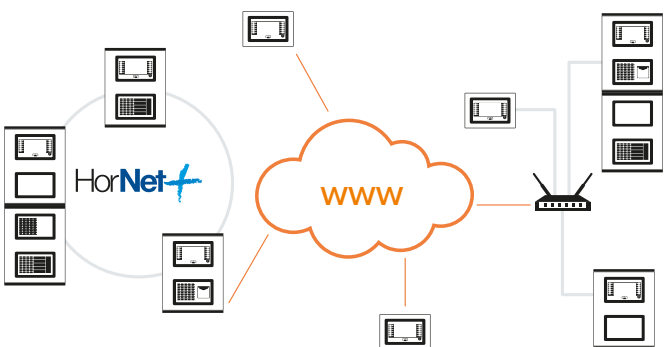
Control panels in an IP network

Several control panels or Hornet+ networks of control panels can be connected together by means of a TCP-IP connection. Each node of such a connection type is identified as a "Cluster"; each "Cluster" can be made up of a single control panel, a Hornet+ network of control panels or a Repeater (FPM-CPU unit configured as a remote keypad).

Analogue detection

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Previdia216

PREVIDIA|MAX

Each installation must start from a base control panel to which, where necessary, can be added function modules, cabinets and accessory devices. Analogue addressable control panel with networking capability for automatic fire detection and alarm signalling systems.

Configuration of the base control panel:

Metal cabinet

N°1 FPMCPU module - control unit with display

N°1 IFM24160 - 4A power-supply modules with built-in battery charger

N°1 IFM2L - 2 loop management module

Previdia216R

As per PREVIDIA216 but comes in red cabinet.

Accessory

A vast selection of accessory items and devices allows easy expansion of the control panel (Add-on cabinets) or assembly of installations in accordance with wiring needs.

PRCAB

Add-on cabinet complete with door, CAN DRIVE bar for the connection of function modules, battery shelves. The door provides two apertures for two

FPM modules (if certain functions are not required, two FPMNUL modules can be used to seal the apertures).

PRCABR: cabinet as per item PRCAB but in red.
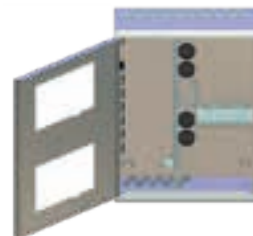
PRCABSP

Pair of brackets for mounting the cabinet away from the wall. This accessory item provides a 5cm

space for the passage of cables between the back of the cabinet and the wall it is attached to.

PRCABSPR: as per item PRCABSP but in red.

PRCABRK

Bracket for mounting the cabinet to a 19' rack.

PRREP

Enclosure for mounting FPMCPU module as remote repeater Comprises a brushed aluminium

plate and a metal backbox, can be wall or surface mounted.

DEMO LUGGAGE FOR PREVIDIA

Demo Luggage for Previdia MAX System, practical suit case containing PREVIDIA 216 control panel

with some loop devices already connected, useful for technical trainings.

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INDSIN1PPRAEDEMO   Demo luggage.

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FPM Modules

The modules from the FPM series are housed on the cabinet frontplate, maximum of 2 per cabinet.

FPMCPU

Main control unit for Previdia control panels. To be connected to the CAN DRIVE bar inside the metal cabinets and equipped with a graphic colour touchscreen. This device manages the control panel and co-ordinates the various function modules. A single Previdia control panel can house 2 of these units (a main unit and a secondary unit as backup). Mounts to the frontplate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.

Provides the following connections

Ethernet connection for networking and remote control.

RS485 channel for repeaters (FPMCPU used as remote keypads- max. 14).

RS485 channel for interfacing with Building Management Software, supports MODBUS RTU protocol.

Mini USB Port for configuration via PC.

RS232 Port for configuration via PC.

ORDER CODES

FPMCPU-L   Light-grey coloured plastic.
FPMCPU-G   Dark-grey coloured plastic.

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FPMLED

Module equipped with 50 configurable tri-colour LEDs (green, yellow and red), provided instant visual signals regarding the status of the various system elements (zones, points, etc.).

Mounts to the frontplate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.

ORDER CODES

FPMLED-L   Plastica colore chiaro.
FPMLED-G   Plastica colore grigio scuro.

FPMLEDPRN

Module equipped with 50 tri-colour LEDs as per the FPMLED module and an 80mm printer, it provides real-time printouts of the events. Mounts to the frontplate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.

ORDER CODES

FPMLEDPRN-L   Light-grey coloured plastic.
FPMLEDPRN-G   Dark-grey coloured plastic.

FPMEXT

LED signalling module for fire extinguishment systems If IFMEXT function modules are housed inside the control panel, the use of one or more FPMEXT modules is compulsory as visual indication of the extinction status, other than that on the display, must be provided. Each FPMEXT module provide the indications of 5 IFMEXT extinguishment modules. Mounts to the frontplate and, if housed in the upper opening, connects to the CAN DRIVE bar. If housed in the lower opening, it connects to the FPM module in the upper opening.

ORDER CODES

FPMEXT-L   Light-grey coloured plastic.
FPMEXT-G   Dark-grey coloured plastic.

FPMNUL

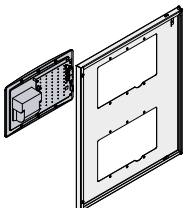Blind module to be used to seal the apertures on the doors of the metal cabinet when certain functions are not required.

ORDER CODES

FPMNUL-L   Light-grey coloured plastic.
FPMNUL-G   Dark-grey coloured plastic.

FPM module assembly.

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IFM function modules

IFM series modules connect to the CAN DRIVE bar on the inside of the cabinets (max. 8 IFM modules per cabinet) depending on the required functions.

IFM24160

Switching power-supply module Connects to the mains power supply and supplies a maximum 4A current to the system. Houses a 1.5A battery charger capable of maintaining under charge two 17Ah or 24Ah batteries. Offers two supervised outputs and a configurable relay output (at factory default configured as Alarm output, AUX output and fault signalling relay). Accepts 230Vac or 115 Vac 50/60 Hz input Each metal cabinet is capable of housing one power-supply module only, each control panel is capable of managing up to 4 power-supply modules (one per cabinet).

IFM2L

Module for the management of two loops Each loop is capable of managing 240 devices. The module contains a step-up switching power-supply module for each Loop, capable of maintaining the operating voltage (during alarm and stand-by conditions) at the set values. Each control panel manages up to 8 IFM2L modules.

IFM4R

4 configurable relay module Each relay supports a maximum load of 5A@MAX 30V.

Each control panel manages a maximum of 16 IFM4R.

IFM4IO

4 power input/output module. Each of the 4 channels can be configured as:

- supervised output capable of erogating a maximum current of 1A@27.6V, configurable;
- supervised input capable of activating warning, pre-alarm and alarm signals, configurable;
- conventional zone capable of managing a line of conventional detectors, maximum 32 detectors, configurable;
- 4-20mA input capable of reading 4-20mA detector signals; settable intervention thresholds; configurable.

Each control panel can manage a maximum of 16 IFM4IO modules.

IFMDIAL

Remote dialler module communicates over PSTN landline and GSM network, capable of sending voice calls resulting from on-board recorded messages and digital calls via the most widely used protocols (SIA, Contact ID, etc.). This module is also capable of sending SMS messages with detailed texts relating to the saved events. Each control panel manages one IFMDIAL module only.

Note - The GSM antenna is not provided. Available as an accessory: REM-ANT

IFM16IO

16 low-power Input/Outputs module. Each channel can be configured as:

- digital input (non supervised) activated with voltage present;
- digital output (non supervised) capable of supporting a maximum load of 100mA@30Vdc.

Each control panel is capable of managing up to 4 IFM16IO modules.
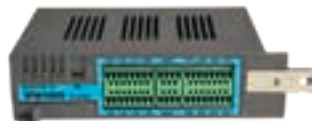
IFMNET

Control panel to Hornet+ network connection module for the connection of one or more control panels in a Hornet+ network, up to a maximum of 48 This module provides two RS485 ports for connection to other control panels; the wiring is completed as closed ring. RS485 speed settable from 9600 to 512k baud, a 12V output is provided for the power supply to eventual RS485 fiber-optic converters. Each control panel manages one IFMNET module only. All the interconnected control panels in the network must be equipped with an IFMNET module.

IFMLAN

Advanced TCP-IP service management module Allows a second control panel connection to the Ethernet network and provides the following services:

- Web Server for system control, management and maintenance;
- Emails containing events details;
- IP ONVIF camera interface for video verification;
- remote communications via SIA-IP protocol;
- BACNET protocol (subject to license);
- ESPA444 protocol;
- voice evacuation system management.

Each control panel can manage one IFMLAN module only.

IFMEXT

Gas extinguishment-system management module Provides terminals for the management of devices which are commonly requested in this type of installation together with the adequate activation logic. The various functions available on the terminals can be replicated on devices connected to the loop (with the exception of the control of the electrovalve). Each control panel manages up to 24 IFMEXT modules, the modules must be associated with the FPMEXT signalling panel. Each FPMEXT module reports the visual signals of a maximum of 5 IFMEXT modules.

IFM module assembly.

* Refer to software section.

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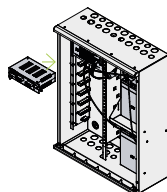
Voice evacuation systems
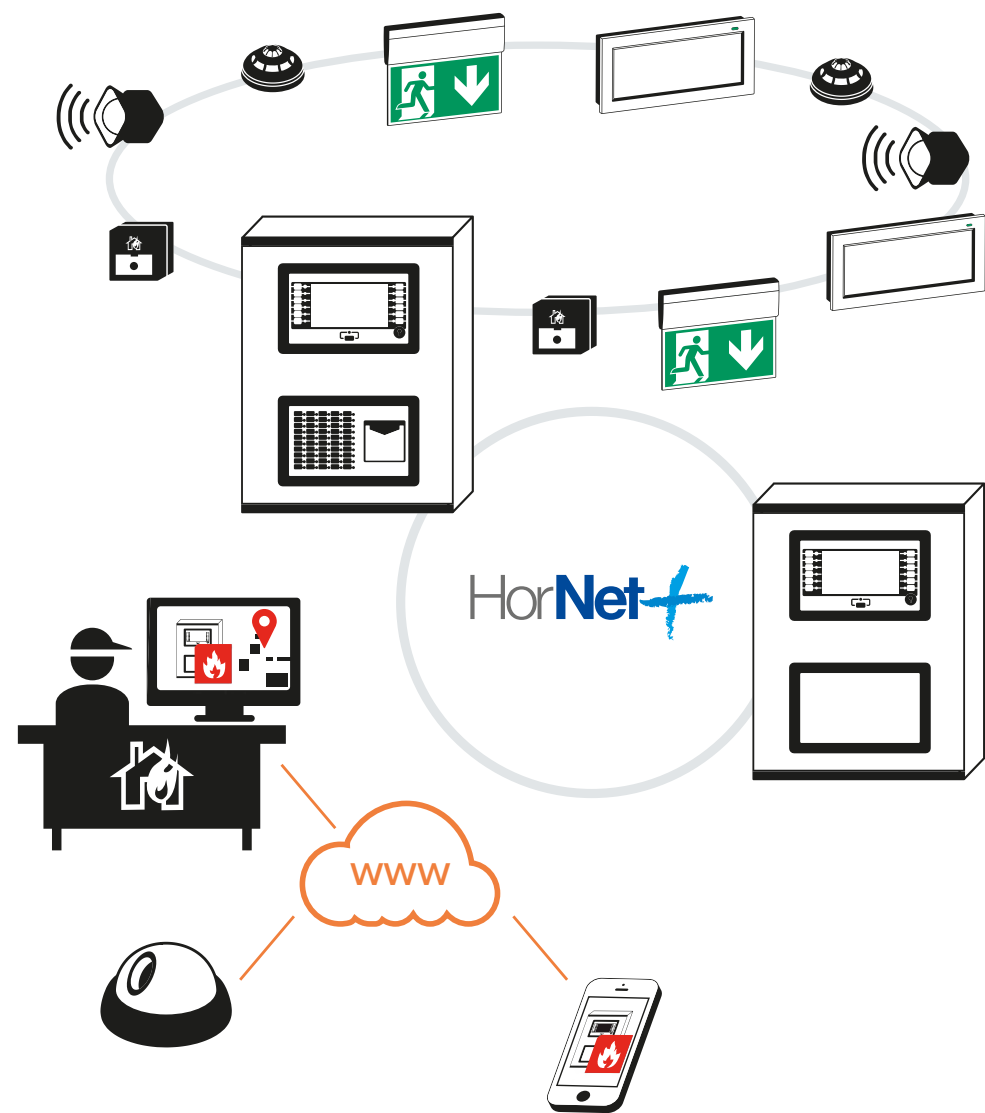
The growing demand for voice evacuation systems for use in conjunction with automatic fire detection and fire alarm systems has led Inim Electronics to sign cooperation agreements with some of the world's leading manufacturers of voice evacuation equipment. Within the scope of these agreements, Inim has developed an innovative communication BUS between Previdia and EVAC equipment that allows you to actually combine the two systems into a single system, thus providing a level of integration and interaction that has never been reached before. Putting the voice evacuation system at the service of the control panel.

The advantages Previdia gains from the Inim-developed communication BUS are many:
• both systems can be supervised by a single point (even from remote locations);
• in the event of a fire emergency, routine sound broadcasts (background music, commercial announcements) stop instantly;
• relevant messages are played on each zone (Warning, Evacuation, End of Emergency);
• it is possible to create even complex evacuation plans, secure and swift evacuation can be coordinated by activating appropriate messages in the various areas related to the detected danger zone;
• wiring, programming and maintenance are all greatly simplified.

For further details regarding Inim's VOICE EVAC offer, please refer to the relevant catalogue.

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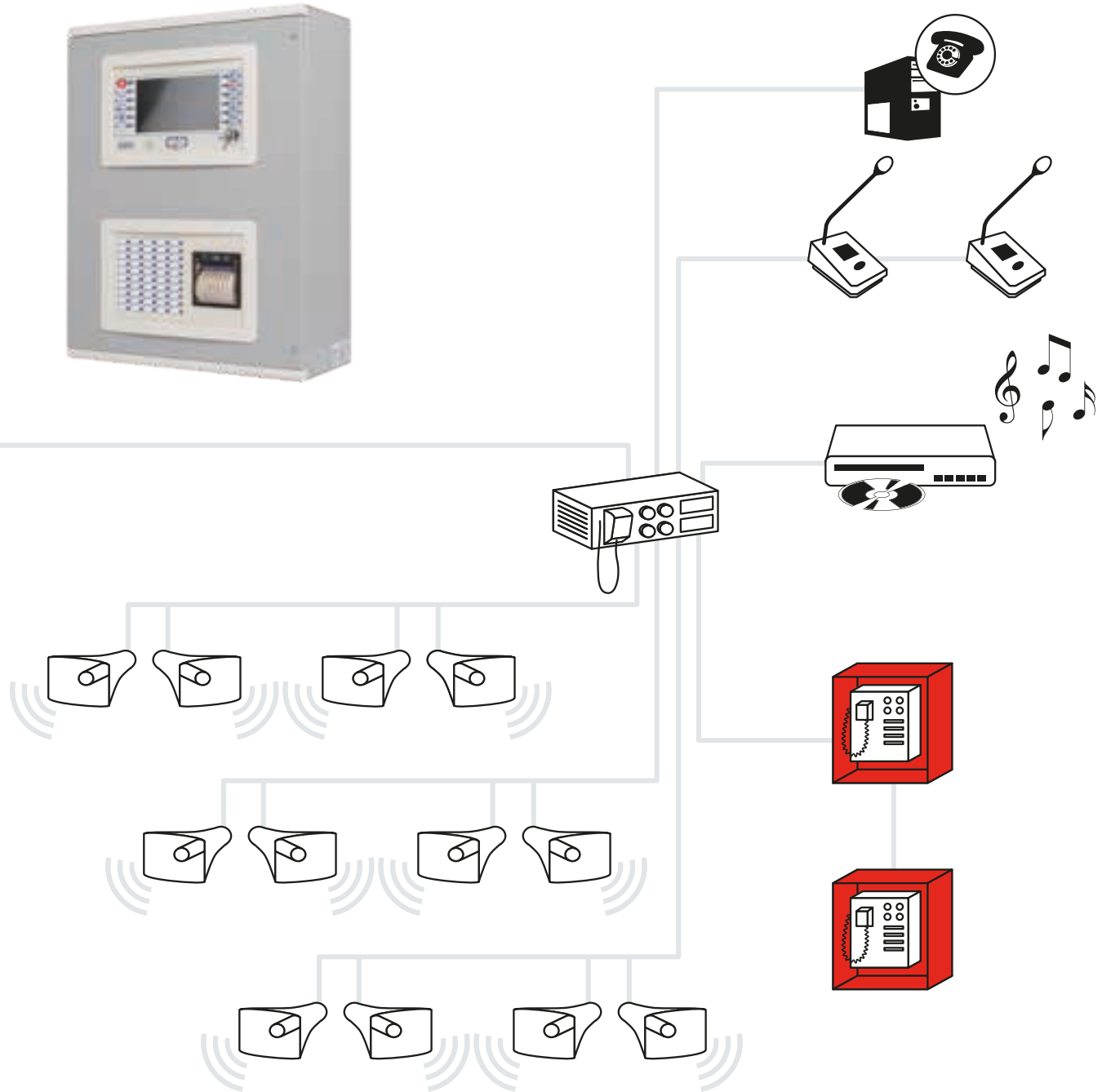
Previdia Compact

PREVIDIACOMPACT

The analogue control panels from the Previdia Compact range are the perfect solution for small to medium installations, they combine the innovative features of the Previdia Max system with user-friendly operation inside a compact cabinet.
Programming from the display through the clear and intuitive user interface minimizes system activation and maintenance times, making Previdia Compact the ideal choice.

Certifications

In automatic fire detection and extinguishing systems, in consideration of their field of use which is decisive for the safety of people and the respective mandatory regime, certifications are a fundamental aspect. This is why the Previdia Compact system has obtained all the necessary certificates from the IMQ in compliance with all the applicable standards:

EN54-2	Control and Indicating Equipment.
EN54-4	Power supply units.
EN54-21	Alarm transmission and fault warning routing equipment.
EN12094-1	Components for gas extinguishing systems - electrical automatic control and delay devices .
EN54-13	Compatibility of system components.

Simple installation

The 4.3" colour LCD graphic touchscreen, the simplicity and immediacy of system configuration and maintenance, the handiness of the intuitive user-interface and the complete programmability of all the essential parameters make it a device that is unmatched on the market.

Simple and intuitive for the user

Previdia Compact control panels manage graphic maps and video verification for rapid and effective management of emergencies in the same way as the Previdia Max modular versions.
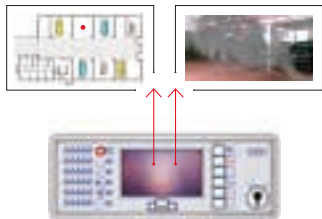
Compact

The Previdia Compact is available in two sizes to suit different installation needs:

- Small with 1.5 A power supply and 7Ah batteries
- Large with 4 A power supply and 17 Ah batteries

Networkable

Previdia Compact control panels are HORNET+ network connectable (MAX 50 nodes), thanks to this feature it is possible to create networks that include Previdia Compact and Previdia Max control panels and thus give the appropriate size to each node in the network.

TCP-IP
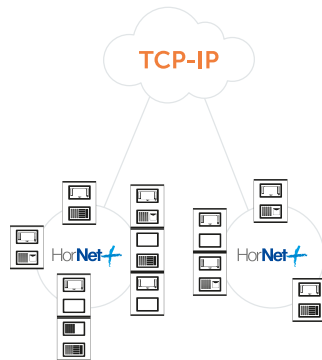
HorNet+   HorNet+

Manages an Extinguishing system

Previdia Compact control panels with the extinguishing function are capable of managing an extinguishing channel. When combined with a HORNET+ network they can operate as satellite control units for Previdia Max expandable control panels.

Always connected

The control panels provide an on-board Ethernet connection for remote networking and supervision. In addition, they manage SIA-IP and MODBUS protocols over TCP-IP.
Installing a Previdia-C-DIAL optional module allows the control panel to manage voice and digital communications over a wired telephone line and a 3G line, as well as record and replay voice messages and send automated SMS text.
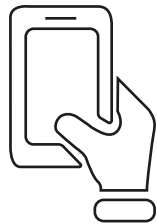
Three different frontplates for clear indications

The control panels come in different models with three different frontplates which provide only proper and efficient indications that facilitate user understanding.

- Standard version.
- Version with LED zone-status indicators.
- Version with LED zone-status indicators and extinguishing channel.

PREVIDIA COMPACT
ADDRESSABLE ANALOGUE DETECTION

EN 54-2 EN 54-21
EN 54-4 EN 12094-1
EN 54-13

Order codes

The control panels are available in different models as shown in the following code: table:

PREVIDIA-COMPACT PREFIX	PREVIDIA-C	Prefix which indicate Previdia-Compact range: **Previdia-C**
NUMBER OF LOOPS	200	Loops capacity: 200= n° 2 Loops 240 device each **200**= n° 2 Loops 240 device each **100**= n° 1 Loops 240 device **050**= n° 1 Loops 64 devices
CABINE SIZE	S	Size of Cabinet, power supply, battery: **S**= 325X325X80mm - 1,5A - 2 x 7Ah **L**= 497X380X87mm - 4A - 2 x 17Ah
ZONE LED MODULE	Z	Zone Led **Z**= zone led available .= zone led not available
EXTINCTION MANAGEMENT	E	Extinction **E**= 1 floodding zone .= no extinction
COLOR	G	Metal cabinet color **G**= grey **R**= red

MODEL	LOOP CAPACITY			CABINET		ZONE STATUS LEDS	EXTINGUISHING MANAGEMENT
	1 LOOP OF 64 POINTS	1 LOOP OF 240 POINTS	2 LOOPS OF 240 POINTS	SMALL WITH 1.5 A POWER SUPPLY AND 7Ah BATTERIES	LARGE WITH 4A POWER SUPPLY AND 17Ah BATTERIES		
C050S	√			√			
C100S		√		√			
C200S			√	√			
C200L			√		√		
C050SZ	√			√		√	
C100SZ		√		√		√	
C200SZ			√	√		√	
C200LZ			√		√	√	
C050SZE	√			√		√	√
C100SZE		√		√		√	√
C200SZE			√	√		√	√
C200LZE			√		√	√	√

PREVIDIA-C-DIAL

Remote communicator module for installation inside Previdia Compact control panels, manages remote communications via wired telephone lines and 3G GSM networks, capable of managing voice calls, records up to 100 voice messages, manages digital calls via the most widely-used protocols as well as automated SMS text messages.

PREVIDIA-C-REP

Remote keypad with a neat, aesthetically pleasing design, it connects to a HORNET+ network (double RS485 connection), operates as a remote keypad for both Previdia Compact and Previdia Max control panels. It provides detailed information about the entire network, customizable display. Available in versions:

- PREVIDIA-C-REPW: base version. Plastic color white. - PREVIDIA-C-REPEW: version with extinction display. Plastic color white. - PREVIDIA-C-REPR: base version. Plastic color red.
- PREVIDIA-C-REPER: version with extinction display. Plastic color red.

PREVIDIA-C-COM
OPTIONAL MODULE FOR SERIAL COMMUNICATORS

Optional Module PREVIDIA-C-COM, to be installed inside PREVIDIA COMPACT cabinet, provide two RS232 Ports and two RS485 Ports for remote communicators using following listed protocols.

Communication protocol	Available on RS232 ports	Available on RS485 ports	Description
ESPA444	YES	NO	Protocol for interfacing with switchboards to pagers, third-party remote communicators
PASO	NO	(some models require both RS485 ports)	Protocol for interfacing between the control panel and EVAC
WEB WAY ONE Voice system	YES	NO	Protocol for interfacing with WEB-WAY-ONE remote communicators
SMART-485-IN	NO	YES	Communication protocol with the Inim Electronics SMART-485-IN module which allows connection to the standard interface panels required in some countries.
LOG TO SERIAL - ASCII PRINTER	YES	NO	Sends real-time events in ASCII format to the port (to a printer or receiving devices)
LOG TO SERIAL- SMART LOOP FORMAT	YES	NO	Sends real-time events to the port in the format used by SmartLoop series control panels

PREVIDIA COMPACT
ADDRESSABLE ANALOGUE DETECTION

EN 54-2   EN 54-21
EN 54-4   EN 12094-1
EN 54-13

FIRE ALARM AND EXTINGUISHING SYSTEMS

PREVIDIA-C-COM-LAN
COMMUNICATIONS MANAGEMENT MODULE
ADVANCED SERIALS AND TCP/IP FUNCTIONS

The PREVIDIA-C-COM-LAN module, in addition to the functions described for the PREVIDIA-C-COM module (2 RS232 ports and 2 RS485 ports) provides a socket for the ethernet network connection, by means of this second connection (it is necessary that the mother board and module are connected to the same network) the Advanced TCP/IP functions listed below are implemented:

• Sending of e-mails
• Interactive WEB page with graphic maps for full management of the control panel
• Video Verification via connection to IP cameras with ONVIF protocol
• BACnet protocol (subject to license PRE-BAC-LIC licence)
• Interfacing with EVAC TUTONDO systems (via TCP/IP)

Technical specification

- Compact analogue-addressable control panel, capable of managing 1 loop of 64 points, 1 loop of 240 points or 2 loops of 240 points (depending on the model).
- Multiprotocol, manages Inim, Apollo and Argus security protocols on the loop.
- 1.5 A or 4 A integrated power supply (depending on the model).
- Integrated battery charger of 7 Ah or 17 Ah (depending on the model).
- Sturdy metal cabinet with frontplate in plastic.
- Terminals for the HORNET+ network connection with other control panels or remote keypads integrated on board.
- On-board Ethernet connection for remote management, networking between control panels or connection to BMS monitoring software, MODBUS protocol over TCP-IP available.
- USB port for the configuration.
- Management of a micro SD card for the display of topographic maps, saving and retrieving of configurations, storing of the events log.
- 4 on-board I/O channels configurable as 1 A supervised power outputs, supervised inputs.

- On-board configurable relay.
- 4.3" colour LCD graphic touchscreen.
- Silicone function keys for basic functions.
- 30 multicoloured LEDs included (depending on the model) for signalling the status of the 30 zones, or configurable.
- Management of a gas-extinguishing channel (depending on the model) certified EN12094-1.
- Programmable from the frontplate or via the Previdia/STUDIO configuration software available on the Inim website.
- 1000 configurable zones.
- 1000 groups of outputs for activation logics.
- Logical equations for the definition of the most complex activation conditions.
- Timers for the timed management of activations, bypass operations, etc.
- Log for the last 2000 event.
- Manages up to 100 access codes.
- Customizable display with images, icons indicating the status of the various elements, text and function buttons.
- Management of evacuation matrices.

Previdia/STUDIO
Programming and management software for Previdia control panels

The Previdia/STUDIO configurationt software is an indispensable tool for the putting into service and maintenance of Previdia series control panels. Simple and intuitive, it allows quick and effective adjustment of the operating parameters of each single element of the system, the definition of the activation logics and the configuration of the various installation components. Capable of operating at both single control panel and network level, it uses a graphic interface especially designed to be used on touch-screen devices. The software is completed with effective diagnostic functions that allow precise fault searches and adjustment of the various intervention thresholds. Equally effective are the reporting functions that allow, starting from the data collected automatically by the control panel, the generation of complete reports in compliance with current legislation. The software also manages a database that can collect and store the data of each completed installation including, for each customer, reports of all maintenance and tests carried out on the system. The Previdia/STUDIO software can connect to the system via RS232, USB or TCP/IP, runs on Windows operating systems and can be downloaded for free by connecting and registering at www.inim.biz.

BACNET Licence

BACNET is a communication protocol for building automation networks developed by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers). BACnet, thanks to its versatility and flexibility, is gradually spreading as a communication standard between devices and building automation systems produced by different manufacturers. The BACnet protocol is implemented on the IFMLAN module for the Previdia Max control panels, its use is subject to licensing. Each license allows you to manage 500 points, to manage a greater number of points you must purchase more than one license. For "point" we intend all those single objects that can be supervised through the BACnet protocol: Loop Devices, Zones, Inputs, Outputs etc.

ORDER CODES

PRALICBAC	BACNET License for 500 Points.

SMARTLOOP
ADDRESSABLE ANALOGUE DETECTION

EN 54-2
EN54-4
EN54-21
EN54-13

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLoop

Networkable analogue addressable fire alarm control panel with 1 loop expandable to 8

SmartLoop-P   SmartLoop-G   SmartLoop-S

The SmartLoop series of analogue addressable fire control panels marks a clear evolution from previous generations. This series has solutions to satisfy all market segments: from small domestic applications requiring 1 loop to large applications requiring 8 loops. At maximum configuration a SmartLoop system can support 30 control panels (arranged in a token-ring) and, if you consider that each control panel can manage up to 8 loops, and that each loop can accommodate as many as 240 devices, it is clearly apparent that the cutting-edge technology of the SmartLoop series has achieved excellence in application flexibility. The SmartLoop series has been specially designed to provide enhanced features, best-in-class performance, simple end-user operation and trouble-free installation, all with the aim of helping the installer company to improve efficiency. These first-rate features have been made possibile by the appliance of multiprocessor architecture with self-diagnosis features co-ordinated by a 32 bit processor. This impressive hardware podium provides the processing resources necessary to ensure the highest levels of reliability, response speed, ease-of-use, connection simplicity, enhancement opportunities and flexibility.
The operational superiority of the SmartLoop system is rooted in the synergy of various state-of-the-art technologies: OpenLoop technology; HorNet token-ring technology; Emergency54 technology and Janus technology (refer to the "Technologies" section for details). The SmartLoop control panel has 5 supervised

outputs for alarm and fault signaling (the efficiency of these outputs is monitored continuously). It can identify and diagnose anomalous conditions and provide an ample spectrum of visual signals: alarm, pre-alarm, fault, early warning, bypass, test, monitor. All system status signaling is indicated on the display and on the system status LEDs. In addition to the supervised outputs, this control panel provides two relays for alarm and fault signaling and also an output for battery shutdown signaling.
If you wish to increase the number of on-panel inputs and outputs, you can install a 6-terminal SmartLoopINOUT expansion board. Each of the SmartLoopINOUT terminals can be set up to operate as either a supervised output; a supervised input or a conventional detector zone. This important feature is yet another innovation pioneered by INIM. These "three-option" terminals abolish the inflexibility normally found in conventional input/output expansion boards and also allow the control panel to manage zones with conventional detectors.
The SmartLoop system provides an RS485 BUS for remote-control Repeater panel connections. Two Repeater models are available: SmartLetUSee/LCD with display; SmartLetUSee/LED with status LEDs. Repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level. The RS485 BUS also accepts and manages a fire extinction control panel. Two models are available: SmartLine020-2EXT (sigle channel); SmartLine036-4EXT (single

channel). These fire extinction control panels are conventional panels from the SmartLine series and are equipped with a SmartLetLoose/ONE fire extinction board.
All the control panels from the SmartLoop series support the SmartLoop/PSTN board which provides voice and digital dialler functions. Programming the system from the control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the display. The time-saving Self-Addressing feature (for the loop devices) simplifies the procedure even more. The system can also be programmed using SmartLeague software application (runs under Windows) which offers an easy-to-use graphic interface. This method will allow the installer to program the system on a home or office computer

and download the pre-set data at a later time via RS232, USB or Ethernet (for SmartLAN enhanced systems). The SmartLeague's simple "drag and drop" operations will allow you to enjoy the convenience and ease of configuring the system with the visual help of a virtual system. The right-across-the-range components, reduced-complexity firmware, and optimized remote programming and diagnostic features keep the technicians time on site to a minimum. The SmartLoop fire control panel with its plain language excels in application flexibility. Its versatility and ease of operation makes it perfect for all market segments, from medium commercial applications to large facilities such as hospitals, shopping malls and airports.

Technical specifications

- Analog-addressable fire control panel
- 2 loops expandable to 8 for 2080 expandable models
1 loop on non-expandable 1010 models
- All models in the SmartLoop series are EN54 Approved
- Multiprocessor hardware structure
- 32 bit main CPU
- OpenLoop Technology
- HorNet token- ring architecture
- Supports Emergency54 emergency configuration (CPU redundancy)
- Manages up to 30 panel token-ring network via the SmartLoop/NET board (accessory item)
- Easy remote access through SmartLAN board (accessory item)
- 2 or 4 wire loop connection
- Supports 240 devices per loop
- Manages up to 8 remote-control Repeater panels connected to the RS485 Interface
- Manages power stations on the RS485 BUS
- Manages a fire-suppression control panel on the RS485 BUS
- 3 general purpose NAC outputs
- 1 NAC Alarm output
- 1 NAC Trouble output
- 1 dry contact Alarm relay
- 1 dry contact Trouble relay
- RS485 BUS for Repeater panel connections (SmartLetUSee/LCD and SmartLetUSee/LED)
- Manages SmartLine020-4EXT and SmartLine036-4EXT fire extinguishing control panels via RS485 BUS
- Manages up to 14 remote-control Repeater panels on the RS485

BUS (maximum wire length between panels 1000m)
- 1 24 V power supply output for external devices
- 1 24 V resettable output
- Battery shutdown relay for deep discharge conditions
- RS232 and USB connectors for uploading/downloading data
- 2000 event buffer
- Self-enrolling (for loop devices)
- Self-addressing (for loop devices)
- Manages conventional detectors (through SmartLoop/INOUT board)
- Emergency phone call (through SmartLoop/PSTN board)
- Large backlit alphanumeric display for easy management of Installer/User interface
- Navigation keys for easy access to menu options
- Fast keys (Test, Beeper, Silence, Reset, Evacuate, Investigate)
- Beeper (provides audible signals)
- User-friendly programming software (runs under Windows)
- Easy system programming from the control panel
- Code or key access to Level 2 functions (EN54 compliant)
- On-board connector for Thermal probe (accessory item).
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal box
- Mains power supply 230Vac ± 10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 480x470x135mm
- Weight (without batteries): 8Kg

ORDER CODES

SmartLoop1010/P	Control panel with 1 loop, non-expandable, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer.
SmartLoop2080/P	Control panel with 2 loops expandable to 8, equipped with keypad, display and status LEDs. This model can be enhanced with a SmartLoop/PRN thermal printer.
SmartLoop1010/G	Control panel with 1 loop, non-expandable, equipped with keypad and display.
SmartLoop1010/S	Control panel with 1 loop, non-expandable, unequipped flush front.
SmartLoop2080/G	Control panel with 2 loops expandable to 8, equipped with keypad and display.
SmartLoop2080/S	Control panel with 2 loops expandable to 8, unequipped flush front.

Analogue detection

SMARTLOOP
ADDRESSABLE ANALOGUE DETECTION

EN 54-2
EN54-4
EN54-21
EN54-13

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLoop system enhancement devices connectable on the RS485 BUS

SmartLetUSee/LCD – SmartLetUSee/LCD – Remote LCD Repeater panel

This LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel and is ideal for installation in remote locations where system information and manual control are required. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.

SmartLetUSee/IP – IP remote control software for SmartLoop panels

The SmartLetUSee IP software application is capable of creating a virtual replica on your PC screen of the SmartLoop fire detection panel which is operating and connected to the Ethernet network. The application allows you to access the system and operate on the virtual control panel in the same way as you would on the real control panel.

SmartLetUSee/LCD-RK – Remote LCD Repeater panel – 19" Rack Mount

This LCD repeater panel is equipped with LEDs, a keypad and display. It replicates all the functions of the main control panel and is suitable for 19" rack mounting. This device occupies 5 rack units. The RS485 BUS, on the SmartLoop control panel motherboard, is capable of accommodating up to 14 Repeater panels which can be mounted as far as 1000 metres from the main unit.

SmartLetUSee/LED – Remote LED Repeater panel

This visual repeater panel provides 48 programmable LEDs capable of signalling conditions generated by the loop points, control panel zones or the system as a whole (alarms, pre-alarms, trouble, etc.). Each LED can be characterized by a label for easy identification of the status it is associated with. This device connects to SmartLetUSee/LCD Repeater panel by means of a flat cable (included) and together they provide maximum system control and visualization capacities.

SmartMimic – Synoptic panel board

This board allows you to create a synoptic panel. All you need to do is attach a map (layout) of the protected premises to the front of any ordinary enclosure, perforate the map (layout) in the places where the zones are located, then wire up the LEDs using the wires supplied with the board. The board connects to the RS485 BUS port of the SmartLoop control panel and provides 48 connections for the LED wires.

SmartLoop/REL – 12 relays expansion module

The SmartLoop/REL board connects to the RS485 BUS of SmartLoop control panels to provide 12 configurable relays. Relays from 1 to 10 are capable of switching a maximum load of 30Vdc, 1A. Relays 11 to 12 are capable of switching a maximum load of 240Vac, 5A.

SmartLoop system enhancement devices connectable on the SmartLoop mother board

SmartLoop/2L – OpenLoop expansion board

SmartLoop/2L expansion boards provide two OpenLoop-technology loops. Up to 3 of these boards can be connected to each expandable control panel (2080 models only) in order to expand the panel to a maximum of 8 loops. OpenLoop-technology loops can be programmed to operate independently with many compatible device types such as Apollo and Argus. Non-expandable control panels (1010 models) cannot accomodate loop expansion boards.

SmartLoop/INOUT – Input and output expansion board

SmartLoop/INOUT expansion boards provide 6 terminals. Each terminal can be set up to operate as either a supervised output NAC (1A max.); supervised input or input line (zone) for conventional detectors. The output trigger signals and the actions generated by the activation of the inputs are fully programmable.

SmartLoop/NET – SmartLoop HorNet network board

The SmartLoop/NET board allows the control panel to be configured in a SmartLoop HorNet network (token-ring). The ring can be created using a 3 pole cable. The maximum cable length of 2000 meters (allowed between each control panel) provides a highly fault-tolerant network. Using a supplementary 2 pole cable (5 poles in all), you can create a protection ring which can pass alarm conditions coming from a fire control panel with microprocessor fault, through the ring thus ensuring maximum reliability (Emergency54 technology).

SmartLoop/PSTN – PSTN Voice and digital dialler

The SmartLoop/PSTN board allows the SmartLoop fire control panel to use the land line (PSTN). It manages (and monitors) 2 lines and uses the most widely used reporting protocols (SIA, Contact ID, etc.). It has an 8 slot audio memory for up to eight voice call messages. Completely managed by its on-board microcontroller, it generates an emergency call in the event of a CPU fault, and guarantees an emergency call in the event of an alarm during control panel CPU fault.

SmartLAN – Ethernet interface for Internet via TCP-IP and UDP

The SmartLoop/LAN board connects to any Ethernet network and allows remote access (via Internet) to the fire control system (allows connection to all the fire control panels in the token-ring network). This board can send detailed e-mails for each event and, using TCP/IP, can send real-time event reports. This board also allows remote upload/download operations and provides a web server for web based access to the system.

SmartLAN/SF – Ethernet interface for Internet via TCP-IP

The SmartLAN/SF board connects to any Ethernet network and allowors remote access (via Internet) to the fire control system (allows connection to all the fire control panels in the token-ring network). This board also allows remote upload/download operations and allows the monitoring of the system by the SmartLook INIM software. Supports Modbus over TCP/IP.

SmartLoop/PRN – On-front Printer Module

The SmartLoop/PRN thermal printer module can be mounted to the front of the control panel. It can be connected directly to the mother board by means of the connection cable (included in the package). It uses 82mm thermal roll paper and provides a continuous real-time printout of events and/or date to date enquiry printouts. It can also printout complete loop reports containing information about dust accumulation and detector functionality. The SmartLoop/PRN can be mounted to SmartLoop1010P and SmartLoop2080P models only.

Control Panel Models	By design		SmartLoop 2L	Opzioni addizionali				
	Keypad and display	48 status LED board		SmartLoop PRN	SmartLoop INOUT	SmartLoop NET	SmartLoop PSTN	SmartLAN SmartLAN/SF
SmartLoop/1010 - P	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
SmartLoop/2080 - P	Yes	Yes	Yes (Max 3)	Yes	Yes	Yes	Yes	Yes
SmartLoop/1010 - G	Yes	-	-	-	Yes	Yes	Yes	Yes
SmartLoop/2080 - G	Yes	-	Yes (Max 3)	-	Yes	Yes	Yes	Yes
SmartLoop/1010 - S	-	-	-	-	Yes	Yes	Yes	Yes
SmartLoop/2080 - S	-	-	Yes (Max 3)	-	Yes	Yes	Yes	Yes

SMARTLOOP
ADDRESSABLE ANALOGUE DETECTION

EN 54-2
EN54-4
EN54-21
EN54-13

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLoop Panel overview

Rete PSTN

SmartLoop PSTN

Loop 01

Loop 02

Loop 07

Loop 08

SmartLoop/2L

SmartLoop/2L

SmartLoop/2L

OpenLoop

17 A/h

17 A/h

SmartLoop INOUT

GAS

ALLARME

ALLARME

janus

SmartLAN

Internet

SmartLetUSee/LCD
Up to 8 detectors

SmartLoop/PRN

Smart Mimic

BUS RS485

USB

RS232

SmartLoop NET

Emergency54

SMARTLOOP

apollo

enea

SmartLoop net

Rete PSTN

HorNet

Up to 30 panels
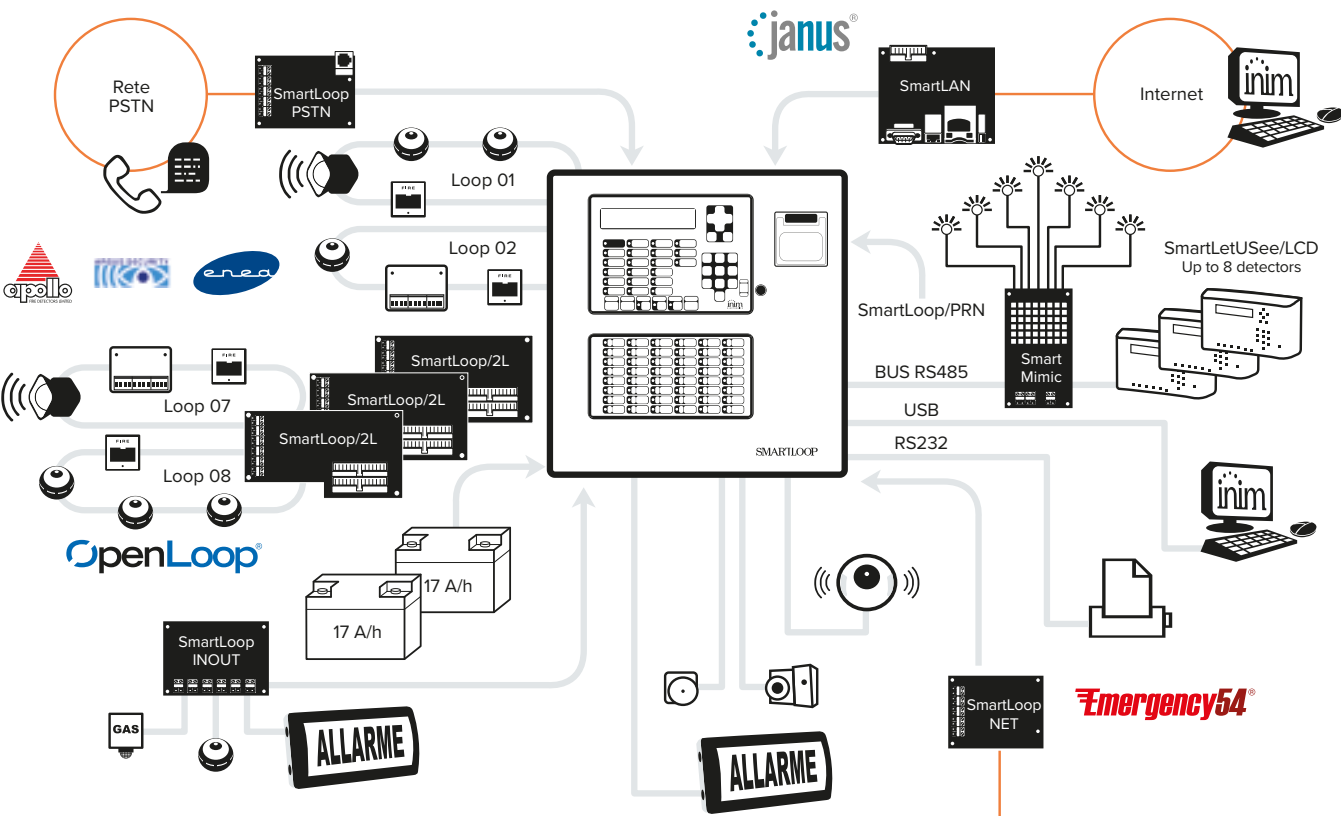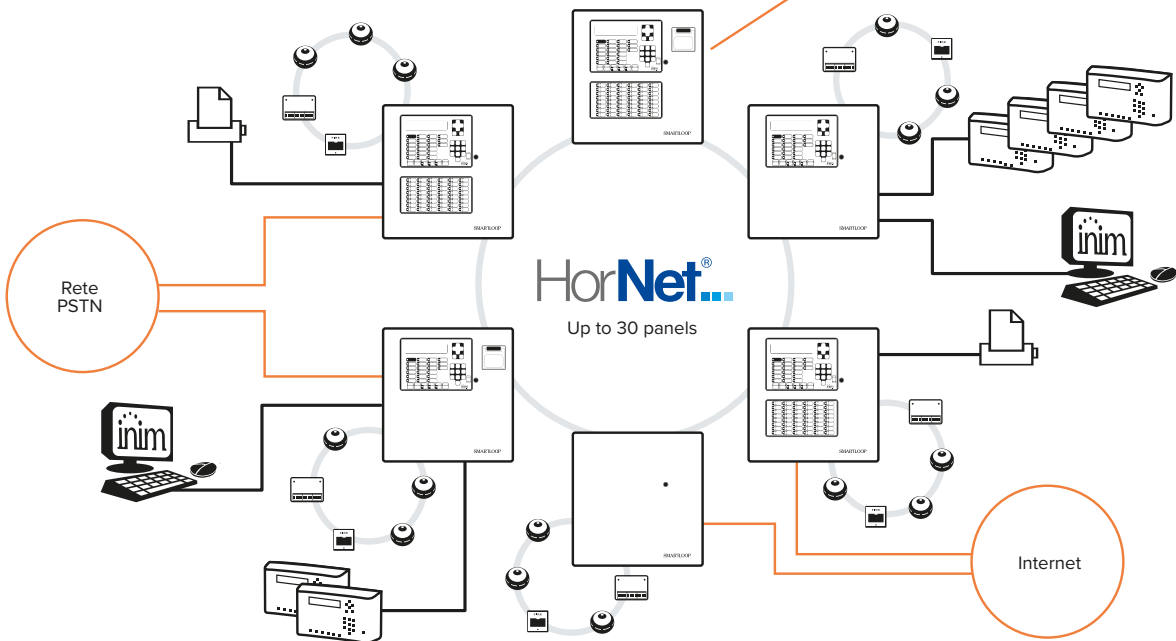
Internet

Fire detection and suppression systems

Operating voltage	230 Vac -15% + 10% 50/60Hz
Maximum internal power current	4 A
Maximum external load current (loop devices, external loads, accessory boards, etc.)	2,8 A
Battery specifications	12V @ 7Ah or 12V @ 17Ah
Operating temperature	Da -5° a +40° C
Dimensions	48 cm x 47 cm x 13,5 cm
Weight	8 Kg

Absorbed current by accessory boards

SmartLoop/2L	stby:20mA MAX:70mA
SmartLoop/INOUT	stby:40mA MAX:300mA
SmartLoop/NET	stby:40mA MAX:40mA
SmartLoop/PSTN	stby:20mA MAX:60mA
SmartLAN	stby:200mA MAX:200mA
SmartLAN/SF	stby:40mA MAX:40mA
SmartMimic	stby: 5mA MAX:50mA
SmartLoop/LED	stby:40mA MAX:80mA
SmartLoop/PRN	stby:0 MAX:1A
SmartLetUSeep/LCD	stby: 40mA MAX:50mA
SmartLetUSeep/LED	stby: 5mA MAX:50mA

Programming Software SmartLeague

The completely-overhauled SmartLeague management and programming software is an indispensable tool for all those professionals who require full control of fire detection systems. In addition to allowing fast configurationof the control panel parameters, it offers an overview of the system and provides wiring diagrams of the various terminals in function of the set options.

ORDER CODES

SmartLoop1010/P	Control panel with 1 loop, non-expandable, equipped with command keypad, display, status LEDs and housing for SmartLoop/PRN printer (accessory item).
SmartLoop2080/P	Control panel with 2 loops expandable to 8, equipped with command keypad, display, status LEDs and housing for SmartLoop/PRN printer (accessory item).
SmartLoop1010/G	Control panel with 1 loop, non-expandable, equipped with command keypad and display.
SmartLoop2080/G	Control panel with 2 loops expandable to 8, equipped with command keypad and display.
SmartLoop1010/S	Control panel with 1 loop, non-expandable, with unequipped flush front.
SmartLoop2080/S	Control panel with 2 loops expandable to 8, with unequipped flush front.
SmartLetUSeeLCD	Remote LCD repeater panel.
SmartLetUSeeLCD/RK	Remote LCD Repeater panel – 19" Rack Mount.
SmartLetUSeeLED	Remote LED Repeater panel.
SmartLoop2L	OpenLoop expansion board.
SmartLoopINOUT	Input and output expansion board.
SmartLoopNET	Board for the connection of SmartLoop control panels in a Hornet network.
SmartLoopPSTN	Landline digital and voice dialler board.
SmartLoopPRN	Thermal printer module.
SmartLAN	Ethernet interface for Internet connections over TCP-IP and remote programming and supervision.
SmartLAN/SF	Ethernet interface for Internet connections over TCP-IP.
SmartMimic	Synoptic board.
SmartLine020/4EXT	Single-channel fire suppression control panel with 4 conventional zones expandable to 20.
SmartLine036/4EXT	Single-channel fire suppression control panel with 4 conventional zones expandable to 39.
SmartLeague	Programming and management software for INIM products runs under Windows.
Link232F9F9	RS232 cable link between PC and INIM devices.
ProbeTH	Thermal probe - protects the battery against overheating and consequent permanent damage.
SPS24060G - SPS24060S	Switching power supply/battery charger 24V 1.5A.
SPS24160G - SPS24160S	Switching power supply/battery charger 24V 4A.

Analogue detection

SMARTLIGHT
ADDRESSABLE ANALOGUE DETECTION

EN 54-2
EN54-4
EN 12094-1

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLight

Single loop analogue-addressable fire detection control panel

The compactness, simple end-user operation, trouble-free installation and uncomplicated programming procedures make this highly competitive control panel ideal for small applications that require first rate performance. It is exactly this market segment that the SmartLight control panel finds its niche. It is perfect for those applications which require a limited number of detectors yet call for the reliability and performance that only analogue-addressable systems can provide. With this application typology in mind, SmartLight is a valid alternative to conventional systems.
The SmartLight control panel is based on OpenLoop technology. Thanks to the many protocols supported by its detection Loop, SmartLight is capable of managing a wide range of detectors and accessory devices and thus offers maximum flexibility and ease-of-use. LOOPMAP and VERSA++ technology combined with ENEA series devices make this control panel a state-of-the-art tool which forms the basis of secure, professional installations capable of satisfying every need. SmartLight provides 2 supervised alarm

outputs (alarm and fault) for the connection of audible-visual signaling devices, a power-supply output for ancillary devices and an output for the activation of external dialers. The control panel manages an ample spectrum of status signals: alarm, pre-alarm, fault, monitor, early warning, bypass, test, etc.
SmartLight manages an RS485 BUS for remote connections. The BUS supports 4 remote repeater panels (SmartLetUSee/LCD-Lite) which replicate all the fire-alarm system data and control panel functions. The BUS also supports 2 power-supply stations and allows the control panel to supervise their functions and activate (deactivate) their outputs during predefined conditions.
Programming the system from the control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the graphic display. The system can also be configured from a PC using INIM's user-friendly software, the pre-set data can be downloaded via an RS232 serial connection. This method makes greatly speeds up the system configuration and startup phases.

Accessory items

SmartLetUSee/LCD-Lite

Remote repeater panel equipped with display and user-interface keypad (up to 4 for each control panel).

SmartLetLoose/ONE

Fire extinction board. Provides control panel with a Fire Extinction Gas control capabilities.

Certified CPD- EN12094-1.

SmartLevel

Power-supply station. Connectable to the RS485 BUS or to the loop (for supervision and management of the control panel power-supply-

station outputs. Refer to "Power-supply stations" section for details).

Features and Technical specifications

- Single-loop analogue-addressable control panel
- Certified EN54-2/EN54-4
- Certified EN12094-1 (Fire extinction)
- VERSA++ Technology (ample range of sensitivity and operative modes)
- LOOPMAP Technology (automatic wiring reconstruction and addressing capabilities)
- Supports 240 devices (64 for "S" model)
- Manages 30 zones (16 for "S" model)
- Manages SmartLetLoose/ONE Fire Extinction board (EN12094-1 compliant accessory item)
- Supports 4 remote repeater panels
- Supports 2 power-supply stations (SmartLevel)
- 1 supervised alarm output (NAC)
- 1 output for communication device activation (dialers)
- 1 supervised fault output
- 1 dry-contact fault output
- 1 power-supply output for external devices
- Battery shutdown relay for deep discharge conditions
- Backlit graphic display for easy management of installer/user interface
- Navigation keys for easy access to graphic display functions
- Fast keys (Silence, Reset, Evacuate, Investigate)
- RS485 BUS for repeater panel and power-supply station (SmartLevel) connections
- Buzzer (provides audible signals)
- 8 Timers
- 8 Logical equations
- RS232 connector for programming via PC
- Programming software
- Easy system programming from the control panel
- Access key for level 2 functions (EN54 compliant)
- Battery charge optimization (via thermal probe)
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac
- Switching power supply/battery charger 1.4A @ 27.6Vdc
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80mm
- Weight (without batteries): 3Kg

SMARTLIGHT
ADDRESSABLE ANALOGUE DETECTION

EN 54-2
EN54-4
EN 12094-1

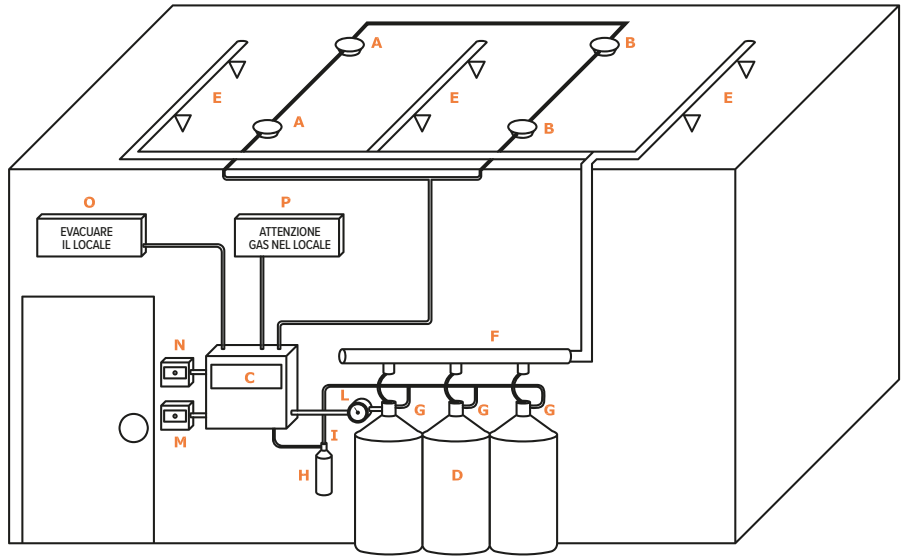FIRE ALARM AND EXTINGUISHING SYSTEMS

Fire extinction

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLight series fire control panel provides the system with GAS extinguisher control capabilities in compliancy with EN12094-1. SmartLetLoose/ONE enhanced control panels provide all the functions required by the applicable normative and are capable of managing all devices required for fire detection system management (refer to "Accessory items for fire extinction systems").

DIAGRAM KEY

A Loop (zone A).
B Loop (zone B).
C SmartLight fire extinction control panel.
D Gas extinguisher cylinder.
E Gas release nozels.
F Collettore.
G Pneumatic release valve.
H Pilot cylinder for gas release.
I Pilot cylinder electrovalve.
L Pressure switc.
M Manual activation button.
N Stop extinguisher gas button.
O Audio visual gas-release-imminent indicator.
P Audio visual gas-present indicator.

Application diagram

Application diagram

Automatic gas extinguisher system

SmartLink
Dialler

SMARTLIGHT

ALLARME

Up to 240 devices
(64 in "S" version)

SmartLetUSee/LCD-Lite
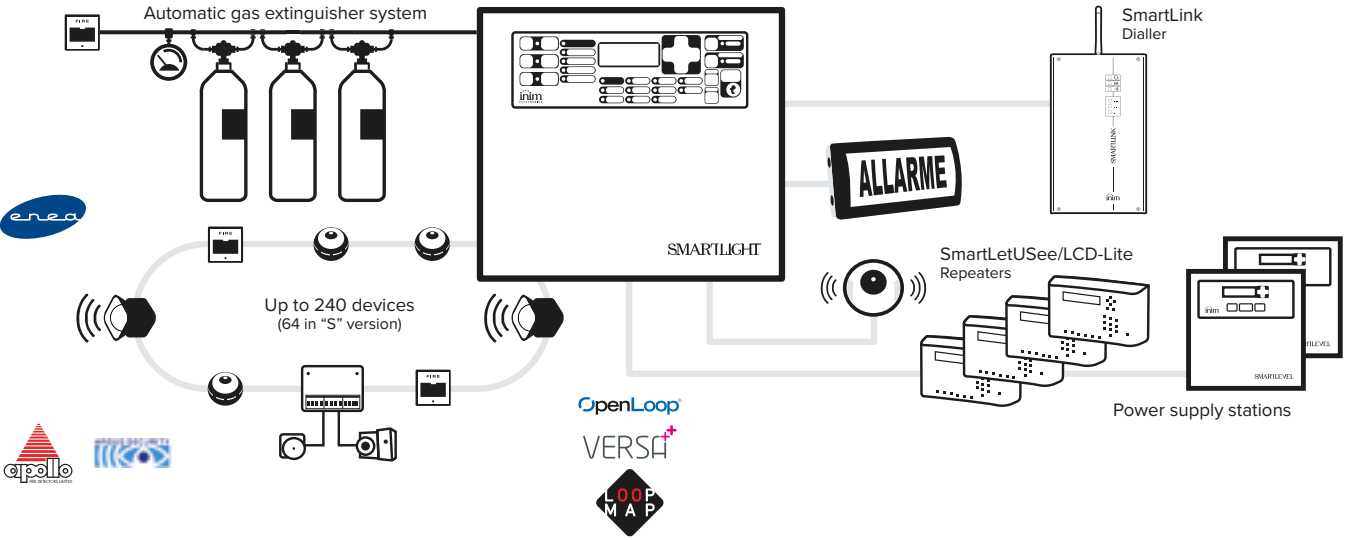Repeaters

Power supply stations

OpenLoop

VERSA+

LOOP MAP

Fire extinction

- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Indicator LEDs (status, disabled, faults)
- Supervised terminals for manual fire extinction commands
- Supervised terminals for STOP fire extinction commands
- Supervised terminals for pressure switch control
- Supervised output for fire suppression system activation
- Supervised output for signaling activation (pre-extinguish)
- Supervised output for "Gas in area" signaling

Programming Software
SmartLeague

The completely-overhauled SmartLeague management and programming software is an indispensable tool for all those professionals who require full control of fire detection systems. In addition to allowing fast configurationof the control panel parameters, it offers an overview of the system and provides wiring diagrams of the various terminals in function of the set options.

ORDER CODES

SmartLight/G	Single loop analog-addressable control panel. Up to 240 devices over the loop and 30 zones.
SmartLight/S	Single loop analog-addressable control panel. Up to 64 devices over the loop and 16 zones.
SmartLetLoose/ONE	Expansion board.
SmartLetUSee/LCD-Lite	Remote-control repeater panel for SmartLine and SmartLight control panels.
SmartLeague	Programming and management software.
Link232F9F9	RS232 cable link between PC and INIM devices.
IPS24060G	Switching power supply/battery charger 1.4A@27.6Vdc.
ProbeTH	Thermal probe for optimized battery charge.

ENEA
ADDRESSABLE ANALOGUE DETECTION

EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11 EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

Enea
Detectors and accessories

ENEA series detectors, as a result of advanced technologies based on new-generation microprocessors, represent the most advanced technology that fire detection equipment can offer today. They provide a vast spectrum of options and flexible functions, all configurable from the control panel (Versa++ technology). ENEA series detectors are capable of implementing a sophisticated set of algorithms, custom created by Inim's R&D professionals, which ensure unequalled reliability and the highest immunity to false alarms. Thanks to INIM's leading-edge LoopMap technology, you can now connect to the control panel by means of a computer or EDRV1000 driver and reconstruct the exact installation topology and obtain an easy-to-use, interactive loop layout map which greatly simplifies and speeds up searches relating to faults and maintenance work. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service. And, thus hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

Main Features

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen.
- Tricolour LED: Red for alarm; Green flash for standby (optional) and for identification after manual activation from the control panel; Yellow for trouble (fault or high level of contamination in the optical smoke chamber)
- Integrated short-circuit isolator.
- Up to 240 devices connectable to the loop.
- Automatic addressing (each device is identified by a factory-assigned serial number).
- Supervised remote output configurable from the control panel.
- Automatic recognition of remote signaller connection.
- Drift compensation for sensor drift caused by dust in the chamber.
- Sensitivity selection for smoke and heat thresholds.
- Operating mode selection (for ED300 version): Only smoke; Only Heat.
- AND mode; OR mode; Plus mode.
- Complete Diagnostics: view the contamination level in the optical chamber and verify real-time values.
- Memory of the smoke and temperature levels measured in the five-minute period prior to the last alarm detected.
- Vast range of options.
- Bypass plate on base guarantees continuity in the event of removal of the detector from the line.

Parameter	ED100	ED200	ED300
Operating voltage		19-30 Vdc	
Consumption during standby		200 uA	
Consumption during alarm		Max 10 mA	
Sensitivity	0.08 – 0.10 – 0.12 – 0.15 dB/m	A1R (58°C + RoR) – B (72°C) – BR(72°C + RoR) – A2S (58°C)	0.08 – 0.10 – 0.12 – 0.15 dB/m A1R (58°C + RoR) – B (72°C) – BR(72°C + RoR) – A2S (58°C) AND –OR – PLUS Mode
Operating temperature		-5°C + 40°C	
Height including base	46mm		54mm
Diameter		110mm	
Weight (with base)		160g	
Weight (without base)		90g	

ED100 Optical smoke detector

The ED100 optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen ensure high immunity to false alarms. The sensitivity can be configured to suit a wide range of applications (sensitivity configurable as: 0.08dB/m; 0.10dB/m; 0.12dB/m; 0.15dB/m).

LPCB
Cert. No. 991d

UL EU

ED200 Heat detector

The ED200 heat detector can be configured in the following modes: A1R mode (fixed threshold at 58°C with thermovelocimetric detection); B mode (fixed threshold at 72°C); A2S mode (fixed threshold at 58°C); BR mode (fixed threshold at 72°C with thermovelocimetric detection). As a result of high flexibility, this detector is useful in places where the environment is dusty or smoky and the risk of false alarms is high.

LPCB
Cert. No. 991f

UL EU

ED300 Smoke and Heat detector

The ED300 smoke and heat detector has new smoke and temperature sensing technologies. As a result, this improved reliability detector responds well to all types of fires (especially to fast burning blazing fires involving inflammable liquids, which produce a limited amount of smoke) and is highly immune to false alarms. The ED300 can be set to the sensitivity mode which best suits the application.

LPCB
Cert. No. 991b

UL EU

Analogue detection

ENEA
ADDRESSABLE ANALOGUE DETECTION

EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11   EN 54-18

- **Plus Mode (set at factory):** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to the maximum value. This operating mode, characterized by high sensitivity allows detection of fast burning blazing fires (for example, fires involving inflammable liquids such as alcohol).
- **OR Mode:** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). This operating mode, characterized by discrete sensitivity analysis, allows the detector to sense fires with a high emission of smoke and low heat output (for example, smouldering fires) and also fires with low emission of smoke and high heat output (for example, burning chemicals).
- **AND Mode:** the detector will trigger an alarm only when the set smoke and heat thresholds (configurable as per the ED100 and ED200) are exceeded at the same time. Given the reduced response, it is necessary to evaluate the risk factor before selecting this operating mode.
- **SMOKE Mode:** the detector will operate as per the ED100.
- **HEAT Mode:** the detector will operate as per the ED200.

EB0010 - Detector base
Detector base accommodates IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.

EB0020 - Relay base
Relay base with a single relay which activates when the detector senses an alarm. The relay base allows you to interface the detector with intrusion control panels in domestic applications.

EB0030 - Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases, h 34 mm.

EB0040
Base protected against dripping water when tilted up to 15 degrees max.

EB0050
Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry.

EB0060*
Mounted base with integrate buzzer driven by "R" output.
* Not for Eu market.

Black plastic and wood-look enclosures available on request for quantities.

Modules

EM312SR Input output module

The EM312SR connects directly to the loop and is equipped with a supervised input (capable of controlling the status of external devices), a supervised output (capable of driving of one or moreAudible/Visual signalling devices) and a voltage free output (capable of driving all types of external devices, for example, electromagnets, etc).

- 1 supervised input
- 1 supervised output
- 1 supervised imput for external power supply
- 1 voltage free output
- Built-in short circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)

LPCB
Cert. No. 991g

EM110 Input module

The EM110 connects directly to the loop and is equipped with a supervised input (capable of controlling the status of external devices).

- 1 supervised input
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)

EM411R Conventional zone interface module

The EM411R zone interface connects directly to the loop and allows conventional zones (maximum 32 devices) to be interfaced to INIM's addressable analogue systems.

- 1 conventional line input
- 1 relay output (2 voltage-free contacts)
- Short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing capacity (each device is identified by a manufacturer-assigned serial number)

EU311 Micromodule

The EU311 MicroModule, due to its reduced-size, can be housed directly inside the enclosure of the device it controls (callpoint, sounderflasher, beam detector, etc.), it connects directly to the loop and is equipped with a supervised input (capable of controlling the status of a device), a loop-powered output (capable of driving of oneAudible/Visual signalling devices).

- 1 supervised input
- 1 loop-powered output
- Built-in short-circuit isolator
- Automatic addressing (each device is identified by a factory-assigned serial number)

LPCB
Cert. No. 991g

	EM312SR	EM110	EU311
Operating voltage	19 – 30Vdc	19 – 30Vdc	19 – 30Vdc
Consumption during standby	80 uA	80 uA	80 uA
Consumption during alarm	20 mA	20 mA	20 mA
Height	53 mm	53 mm	37 mm
Width	100 mm	100 mm	40 mm
Depth (including terminals)	29mm	29mm	15mm
Weight	66 g	66 g	15 g

EM3xx Multi Input/output module and conventional line interface

The module is connected directly to Loop and provide up to 4 input and 4 output according to model (refer to table). In the versions with 4 inputs 2 of them can be configured as conventional line interface powered from loop or from a local power supply. The 4 outputs, according to model, can be supervised for sounder control or voltage free contacts.

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Model	Inputs (selectable as conventional zone)	Outputs
EM344S	4 (2)	4 (supervised)
EM344R	4 (2)	4 (voltage free)
EM340	4 (2)	//
EM304S	//	4 (supervised)
EM304R	//	4 (voltage free)

EM500 Module for the creation of synoptic panels for fire-detection control panels from the Previdia range

The EM500 consists of two separate units (both supplied):

Module EM500 - Connects to and feeds directly from the Loop, provides 8 LED driver connectors (supplied) and 5 input terminals. Each of the 8 LEDs can be configured to activate in response to any condition, each of the input terminals can be used for any function.

The EM500-EXP expansion module - Connects to the EM500 module via a connection wire (supplied) and adds a further 24 LEDs (supplied). Each LED is configurable, requires ancillary power supply voltage (24V DC).

Manual call-points

EC0011E Manual callpoint for outdoor installation (IP67)

- Addressable callpoint
- Manual callpoint with resettable element. Weatherproof to IP67, suitable for outdoor installation.

LPCB
Cert. No. 991h

EC0020 Manual callpoint

- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag and LED confirm activation.

Suitable to use with WCP0020 (transparent plastic screen against accidental activation) and FCP0020 (Plstic bracket for flush mounting, adaptable to UK single gang back box). DBCP0020 – Deep box for external pipe fitting (base h = 33mm; base + callpoint h = 57mm).

LPCB
Cert. No. 991h

EM600 - HUSH BUTTON Home mute button

The EM600 module (HUSH BUTTON) finds its ideal collocation in residential installations and in applications where a control panel is installed for the protection of an entire apartment block with detectors inside each separate unit. Installation of an EM600 button inside each unit provides only the unit occupants with a voice message alert in the event of a smoke alarm and possible danger. In this way, should a false alarm occur, triggered perhaps by activities such as cooking in the kitchen, the unit occupants have the possibility to silence the alarm, remove its cause and open a window for several minutes in order to ventilate the room. Occupants can silence an alarm inside their unit for three consecutive times after which a message is broadcast to all the units in the building. Additionally, as a way of preventing false alarms caused by cooking-generated smoke, unit occupants can simply press their HUSH BUTTON and disable smoke detection before starting their cooking activities. Clear and intuitive voice messages guide the building occupants throughout the various phases.

Remote indicators

IL0010 Remote indicator

Remote fire-warning indicator.

Sounders and warning signs

ESS022* Addressable warning sign

Visual/Audible alarm sign with certified EN54-3 audible signal capability and certified EN54-23 visual signal capability. The sign comprises an EM312SR module. It must be connected to the loop and a 24Vdc power source. As well as activating warning signals, this device provides an input for a conventional alarm button and a relay for the control of an electromagnetic stop. It is a cost-efficient solution for the complete control of a Fire Exit (REI Door).

Sound output @ 1m	Light output	Dimensions	Current consumption
92 dB	EN54-23 W 4,6 - 9,1	293x130x75mm	50 mA

ESS021* Addressable warning sign

Visual/Audible alarm sign with certified EN54-3 audible signal capability. The sign comprises an EM312SR module, it must be connected to the loop and to a 24Vdc power source. This device, as well as activating warning signals, provides an input for a conventional alarm callpoint and a relay for the control of an electromagnetic stop. The ESS021 provides a cost-efficient solution for the complete control of a fire exit (REI Door).
* Refer to accessory section for available text.

Sound output @ 1m	Power supply	Consumption	Operating temperature	Dimensions
92 dB	from 18Vdc to 30Vdc	21mA (media)	from -10°C to +55°C	292x130x55mm

ISB1010 Base with audible alarm indicator, non-addressable
ISB1020 Base with visual-audible alarm indicator, non addressable
ISB1030 Base with audible alarm indicator and voice functions, non-addressable
ISB1050 Base with visual-audible alarm indicator and voice functions, non-addressable

Base for Enea series detectors with audible/visual-audible alarm indicator, activated by the R output of the detector, IP21 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone from the 14 tones available on the device as well as adjustment of the volume and flasher intensity (only for models with visual alarm indicators). For models with the voice alarm function, besides the 14 tones, it is also possible to choose from the 16 voice messages available in 8 different languages. The EITK2000 also provides for the customization of tones and voice messages. The device is powered via the loop but is also equipped with terminals for an optional separate power input.

Tone		14 + 16 voice messages selectable via EITK2000
Sound output @ 1m		MAX 101 dB
Current absorbed during an alarm		20 mA
Visual range (EN54-23)	High Power	C-3-10 O-4-10
	Low Power	C-3-9 O-3,5-9
IP protection rating		IP21
Operating voltage		18 – 30 Vdc
Consumption		From 10 to 40mA depending on the selected tone
Operating temperature		-20 - +70°C
Weight		200 g
Dimensions		112x112x53 mm

ESB1010 Base with audible alarm indicator, addressable
ESB1020 Base with visual-audible alarm indicator, addressable
ESB1030 Base with audible alarm indicator and voice functions, addressable
ESB1050 Base with visual-audible alarm indicator and voice functions, addressable

Base for Enea series detectors with audible/visual-audible alarm indicator, equipped with own address and capable of changing tone or voice message in accordance with the situation (only for versions with the voice function), IP21 protection rated. Volume, flash intensity and sound sequence can be selected via the control panel from the 14 tones and 16 voice messages available in 8 different languages on-board the device (only for versions with the voice function). For models with the voice function, it is also possible to customize tones/voice messages by means of the EITK2000. The device is powered via the loop but is also equipped with terminals for an optional separate power input.

Tone		14 + 16 voice messages selectable via EITK2000
Sound output @ 1m		MAX 101 dB
Current absorbed during an alarm		20 mA
Visual range (EN54-23)	High Power	C-3-10 O-4-10
	Low Power	C-3-9 O-3,5-9
IP protection rating		IP21
Operating voltage		18 – 30 Vdc
Consumption		From 10 to 40mA depending on the selected tone
Operating temperature		-20 - +70°C
Weight		200 g
Dimensions		112x112x53 mm

Analogue detection

EN 54-3
EN 54-17
EN 54-23

ES1010 Audible alarm indicator, addressable
ES1020 Visual-audible alarm indicator, addressable
ES1030 Audible alarm indicator with voice functions, addressable
ES1050 Visual-audible alarm indicator with voice functions, addressable

Ceiling mount addressable audible/visual-audible alarm indicator, IP21 protection rated. Volume, flash intensity and sound sequences can be selected via the control panel from the 14 tones and 16 voice messages available in 8 different languages on-board the device (only for versions with the voice function). For models with the voice function, it is also possible to customize tones/voice messages by means of the EITK2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.

Tone		14 + 16 voice messages selectable via EITK2000
Sound output @ 1m		MAX 101 dB
Visual range (EN54-23)	High Power	C-3-10 O-4-10
	Low Power	C-3-9 O-3,5-9
IP protection rating		IP21
Operating voltage		18 – 30 Vdc
Consumption		From 10 to 40mA depending on the selected tone
Operating temperature		-20 - +70°C
Weight		200 g
Dimensions		112x112x53 mm

ES2010RE Audible alarm indicator in red casing
ES2010WE Audible alarm indicator in white casing
ES2020RE Visual-audible alarm indicator in red casing
ES2020WE Visual-audible alarm indicator in white casing
ES2030RE Audible alarm indicator with voice alert in Red casing
ES2030WE Visual-audible alarm indicator in white casing
ES2050RE Visual-audible alarm indicator with voice alert in red casing
ES2050WE Visual-audible alarm indicator with voice alert in white casing

Wall mount addressable audible/visual-audible alarm indicator, IP65 protection rated. Volume, flash intensity and sound sequences can be selected via the control panel (and diversified in accordance with the situation) from the 14 tones and 16 voice messages available in 8 different languages on-board the device (only for versions with the voice function). For models with the voice function, it is also possible to customize tones/voice messages by means of the EITK2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.

Tone		14 + 16 voice messages selectable via EITK2000
Sound output @ 1m		MAX 101 dB
Visual range (EN54-23)	High Power	C-3-10 O-4-10
	Low Power	C-3-9 O-3,5-9
IP protection rating		IP65
Operating voltage		18 – 30 Vdc
Consumption		From 10 to 40mA depending on the selected tone
Operating temperature		-20 - +70°C
Weight		200 g
Dimensions		112x112x53 mm

EITK2000-ToolKit

Tool for configuration, maintenance and diagnostics

Front view of driver

EITK2000
ToolKit

The EITK2000 is a kit composed of the EDRV2000 driver, the FireGenius-PRO software and a series of accessories for connection and power supply. The EDRV2000 driver, thanks to its ergonomic shape, provides an easy way of performing the manual addressing operations related to addressable analogue devices from the Enea series when you do not want to use the automatic addressing function provided by Inim control panels.
The driver is also equipped with an "ICP" communication port which makes it possible to connect to fire alarm signallers from the Iris and Enea series and configure their operating parameters (select tones/alarm messages, volume, flasher brightness, etc.). By means of the driver and the FireGenius-PRO software, it is also possible to create custom tones/messages for signalling devices either by extracting tones from the vast library available and composing tones of your liking or starting from audio files. The kit also allows you to take full advantage of the unique features offered by LoopMap and Versa ++ technologies integrated into the addressable analogue detectors of the ENEA series. By connecting the EDRV2000 driver to the loop and interfacing it with a PC running FireGenius-PRO software, it is possible, thanks to the LoopMap technology, to reconstruct the wiring diagram of the loop itself.
The various connected devices are identified by their unique serial number and their type. The FireGenius-PRO software is capable of reconstructing the order of the wiring along the cable and of recognizing and tracing any "T" junctions present along the path. The wiring will be shown by the FireGenius-PRO software in graphical form.
By clicking on the elements of the system it will be possible to have information regarding their status (Smoke level, contamination, etc.) and interact in real time, for example, by activating LEDs or outputs.

Smoke and temperature graph

Loop configuration

ORDER CODES

EITK2000	Kit for manual addressing, configuration, maintenance and diagnosis of systems based on IRIS and ENEA series devices.
EITK-DRV	Driver for zones made up of IRIS series devices or loops with ENEA series devices.
EITK-BASE	Base for IRIS and ENEA series detectors.
EITK-PWSP	Power supply for the EITKDRV driver.

Analogue detection

ARGUS
ADDRESSABLE ANALOGUE DETECTION

EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11   EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

Vega

Analogue addressable detector series

All Vega series detectors are certified in accordance with the applicable EN54 standards and CE marked in accordance with the European Constuction Products Directive (CPD) by BS.

VEGA V100 - Intelligent Photo Detector
The signal processing used by this detector efficiently analyzes the conditions within the protected environment and ensures high immunity to false alarms.

VEGA V350 - Intelligent thermal detector
This detector provides an advanced method of detection combined with sophisticated analysis and control panel communication. It uses an accurate thermistor to sense temperature changes in the protected environment. This electronic sensing method ensures detection efficiency and high immunity to false alarms. It is programmable by means of the VPU100 field programmer as Rate-of-rise or Fixed high temperature.

VEGA V200 - Optical Heat Detector
The detector design incorporates an advanced algorithm which uses more than one parameter (the combination of smoke inside the optical chamber and the temperature within the protected environment) to provide precise alarm evaluation and high immunity to false alarms.

Décor line
V100, V200 and V350 detectors are also available with décor line covers for aesthetically demanding environments.

LPCB   VdS
Cert. No. 998b   G209175

LPCB   VdS
Cert. No. 998a   G209177

LPCB   VdS
Cert. No. 998c   G209176

Modules

	Wall mounting	Minimodule
Single supervised input	VMI100	VMMI100 (VdS G212064)
Single supervised output	VMC100	VMMC100 (VdS G212066)
Input/Output Supervised Output	VMIC100	VMMIC100 (VdS G212067)
Input/Output Voltage free relay	VMIC120	VMMIC120 (VdS G212065)
Unsupervised output	VMC120	VMMC120 (VdS G212063)

ORDER CODES

VMCZ100 - Conventional line interface module
This device allows you to interface a line of conventional devices (detectors, callpoints, etc.) to the loop. Supplied in its own enclosure 130x95x60 with IP66 protection rating.

VMIC404 - Module with 4 supervised inputs + 4 outputs (dry contacts)
This device occupies 8 addresses. Supplied in its own enclosure 210x170x65 with IP66 protection rating.

Callpoints

VCP100 - Addressable resettable Callpoint
VCP100 callpoints connect directly to the detection loops of addressable analogue control panels.
LPCB Cert. No. 998h

Detector bases

VB100 - Standard base for analogue addressable VEGA series detectors

VDBS100 - Deep base for analogue addressable VEGA series detectors

Audio visual Signalling

CWS100 – Conventional IP65 Sounder
LPCB Cert. No. 928w

CWS100-AV – Conventional IP65 Sounder and Beacon
LPCB Cert. No. 925y

ALWS-MOD – Intelligent sounder loop interface module

IL0010 - Alarm Repeater

Replicates the signal generated by a detector in alarm status.

Accessories

VPU100 - Driver

Configures the addresses of Argus series devices.

Analogue detection

APOLLO
ADDRESSABLE ANALOGUE DETECTION

EN 54-7   EN 54-3
EN 54-5   EN 54-17
EN 54-11   EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

XP95 Series Detectors

55000-620

Low-profile analogue optical smoke detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote

output capable of supplying 17 mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.

LPCB Cert. No. 010g
VdS

55000-420

Low-profile analogue heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped

with status signalling LEDs and a remote output capable of supplying 17 mA maximum. Built-in antiremoval protection.

LPCB Cert. No. 010p
VdS

55000-401

Low-profile analogue high temperature detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped

with status signalling LEDs and a remote output capable of supplying 17 mA maximum. Built-in antiremoval protection.

LPCB Cert. No. 010p

55000-885

Low-profile analogue optical smoke and heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote

output capable of supplying 17 mA maximum. Detachable optical chamber for easy cleaning and maintenance. Certification: EN54/pt7 and pt5 VDS.

LPCB Cert. No. 010m
VdS

38531-771

Spare address card with plastic tag. The tag allows accurate identification and eliminates addressing

errors during maintenance.

45681-284

Addressable base with built-in isolator in white thermoplastic with bayonet lock for XP95 and

Discovery detectors. Signalling LED indicates isolator activation.

Discovery series detectors

58000-600

Low-profile optical smoke detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of supplying 17 mA maximum.

Operating voltage 14-28 Vcc (polarity-insensitive). Apollo Discovery protocol, Detachable optical chamber for easy cleaning and maintenance. Certification: EN54/pt7.

LPCB Cert. No. 010q
VdS G299037

58000-400

Low-profile heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base.

Equipped with status signalling LEDs and a remote output capable of supplying 17 mA maximum. Built-in antiremoval protection.

LPCB Cert. No. 010p
VdS G299039

58000-700

Low-profile optical smoke and heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and

a remote output capable of supplying 17 mA maximum. Detachable optical chamber for easy cleaning and maintenance. Built-in antiremoval protection.

LPCB Cert. No. 010h
VdS G299038

58000-300

Carbon monoxide detector for the sensing of smouldering fires. This CO detector responds to

certain types of fire only and does not detect the presence of smoke or flames.

58000-305

Carbon monoxide detector for the sensing of smouldering fires (CO detection) and the detection of flames (heat sensing). Ideal for hotel rooms

where steam from bathrooms may cause optical smoke detectors to trigger false alarms.

LPCB Cert. No. 010q
VdS G215018

45681-210

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors.

Equipped with 4 screw terminals for quick, reliable installation. Base supplied with address card.

45681-242

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. The on-board relay provides a NC/NO contact

configurable from the control panel. Base supplied with address card.

APOLLO
ADDRESSABLE ANALOGUE DETECTION

EN 54-7 EN 54-3
EN 54-5 EN 54-17
EN 54-11 EN 54-18

FIRE ALARM AND EXTINGUISHING SYSTEMS

Accessory items

53832-070

Remote indicator provides visual signals relating to the status of detectors located in difficult-to-inspect places. Suitable for all types of detectors. Polarity insensitive.

55000-760

Single input module for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting and short-circuits on the line. A red LED indicates interface alarm status. Complete with isolator.

LPCB
Cert. No. 010ah

VdS
G210034

55000-845

Interface for analogue control panels capable of managing an absorption line for conventional detectors. The interface comes with enclosure and terminal board. Complete with isolator.

LPCB
Cert. No. 010ah

VdS
G201094

55000-847

Input/output module suitable for Normally Open contacts (beam detectors, gas detectors, etc.). The input line is supervised and monitored for wire-cutting and short-circuits on the line. The output line voltage-free contacts (Common; Normally Closed; Normally Open). A red LED indicates interface alarm status. Complete with isolator.

LPCB
Cert. No. 010ah

VdS
G201032

55000-852

Supervised single-output module for sounders and bells. The output is monitored for wire-cutting and short-circuits on the line. The load requires an external supplementary power supply. The interface is equipped with a NO/NC fault input for control of the supplementary power supply. A red LED indicates interface alarm status. Polarity insensitive. Complete with isolator.

LPCB
Cert. No. 010ah

VdS
G201095

55100-908

Analogue manual callpoint in red thermoplastic enclosure with resettable operating element. Addressable programmed via a DIP switch housed inside the enclosure. Equipped with special key for reset and test functions. A red LED indicates alarm status. Complete with isolator.

LPCB
Cert. No. 010w

45681-330

Addressable sounder beacon base with isolator. Suitable for connection to the detection loop of a fire-detection panel. Accepts the direct attachment of a detector to the beacon to create a single device with different addresses. Addressable programmed via a DIP switch housed inside the base. Selectable sound-output volume. Supplementary power supply not required. White enclosure. Complete with isolator.

55000-278

100dB sounder. Suitable for connection to the detection loop of a control panel. Addressable programmed via a DIP switch housed inside the sounder. Selectable sound-output volume. Supplementary power supply not required. White enclosure.

55000-878

Beacon with high-efficiency LED. Suitable for connection to the detection loop of a fire detection panel. Requires addressable mounting base. Emits a red intermittent light at one-second intervals. Supplementary power supply not required.

SMARTLINE
CONVENTIONAL DETECTION

EN 54-2   EN 54-21
EN 54-4   EN 54-13
EN 12094-1

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLine

Conventional control panels with 2 zones or 4 zones expandable to 36

Accessory items

SmartLine/8Z

8 zone expansion board equipped with an additional supervised output.

SmartLetUSee/LCD-Lite

Remote repeater panel with display and keypad for user operations.

SmartLAN/485

Ethernet connection board. Allows the control panel to connect to an Ethernet network for remote for programming and monitoring via the Internet using SmartLook graphic maps.
The board implements SIA-IP communication protocol

SmartLetLoose/ONE

Fire extinction board. Provides the system with GAS extinguisher control capabilities.
Approved CPD - EN12094-1.

SmartLine/LOGEXP

Log event capacity expansion board for the storage of the last 2,000 events that occurred in the system. SmartLine/LOGEXP provides a non-volatile events log archive and retains memory even when the control panel is switched off.

SmartLevel

Power supply station connectable to the RS485 BUS (for supervision and management of the control panel power outputs). Refer to "Power supply stations".

The SmartLine conventional fire-detection control panel series offers a 2 zone non-expandable model (SmartLine020-2), a 4 zone model expandable to 20 zones (SmartLine020-4) and a 4 zone model expandable to 36 zones (SmartLine036-4).
The extreme compactness, trouble-free installation, uncomplicated programming procedures and simple end-user operation make this highly competitive control panel ideal for all small and medium applications, especially those applications where fast installation and programming are among the most important aspects of the system. The numerous functions (timers, equational logic, etc.), extensive flexibility (automatic output balancing, multifunction inputs, customizable outputs, gas function integration, etc.), and innovative connectivity capabilities (RS485 BUS for power supply stations, Internet connection, etc.), provide the tranquillity of knowing for sure that this powerful tool is capable of satisfying every need of every type of installation.
SmartLine control panels have supervised outputs (one on the motherboard and one on each added expansion) for the activation of audio-visual signalling devices, a customizable relay output, fault signaling outputs and two 24V outputs (one constant and one interruptible by installer-defined conditions). Additionally, each detection zone provides a terminal which can be configured as:

open-collector output (activated by programmable conditions), supervised input, or Gas 4-20mA detector interface. System information is provided through the graphic display and LEDs on the control panel frontplate.
The RS485 BUS supports 4 remote repeater panels (SmartLetUSee/ LCD-Lite). These repeater panels replicate all the fire alarm system data and allow users to access and control the system in accordance with their authorized access level. The BUS also supports two power-supply stations which can be connected in such a way as to allow supervision of their functionality and activation/deactivation of their output power during predefined conditions. Programming the system from the control panel is straightforward and trouble-free thanks to the easy-to-follow instructions on the display.
The system can also be programmed by means of the SmartLeague software application. This intuitive programming software greatly simplifies the programming procedure.
The SmartLAN/485 board allows the control panel to connect to an Ethernet network for remote access via the Internet. Once the remote connection has been established, it is possible to modify the configuration parameters, upload/download programming data and/ or manage the system by means of the supervisory software based on SmartLook graphic maps.

Features and Technical specifications

- Conventional fire-detection control panel
- Available with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36
- Certified EN54 / EN54-2
- Certified EN12094-1 (Fire extinction)
- Supports up to 32 devices per zone
- Manages SmartLetLoose/ONE Fire Extinction board (Function EN12094-1 Approved)
- 1 supervised alarm output (NAC)
- 1 output for communicator/dialler activation
- 1 dry-contact alarm output
- 1 dry-contact fault output
- 1 ancillary power supply output
- 1 interruptible power supply output
- 1 additional terminal per zone configurable as: open-collector output, supervised input, Gas detector input with 4-20mA interface
- Battery shutdown relay for deep discharge conditions
- Backlit graphic display for easy management of Installer/User interface
- Navigation keys for easy access to graphic display functions
- Fast keys (Silence, Reset, Evacuate, Investigate)
- RS485 BUS for the connection of Repeater panels and Power

supply stations (SmartLevel)
- Buzzer (provides audible signals)
- 8 Timers
- 8 logical equations
- Automatic balancing of individual detector lines
- RS232 connector for system programming from a PC
- Programming software
- Easy system programming from the control panel
- Access key for Level 2 functions (EN54 compliant)
- Thermal probe for battery optimization
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac
- Switching power supply/battery charger 1.4A @ 27.6Vdc (for SmartLine020) or 4A @ 27.6Vdc (for SmartLine036-4)
- Battery housing for two 7Ah - 12V batteries (for SmartLine020) or two 17Ah - 12V batteries (for SmartLine036-4)
- Dimensions (HxWxD for SmartLine020): 325x325x80mm - (HxWxD for SmartLine036-4): 497x380x87mm
- Weight (without batteries): SmartLine020= 3Kg; SmartLine036-4= 6Kg
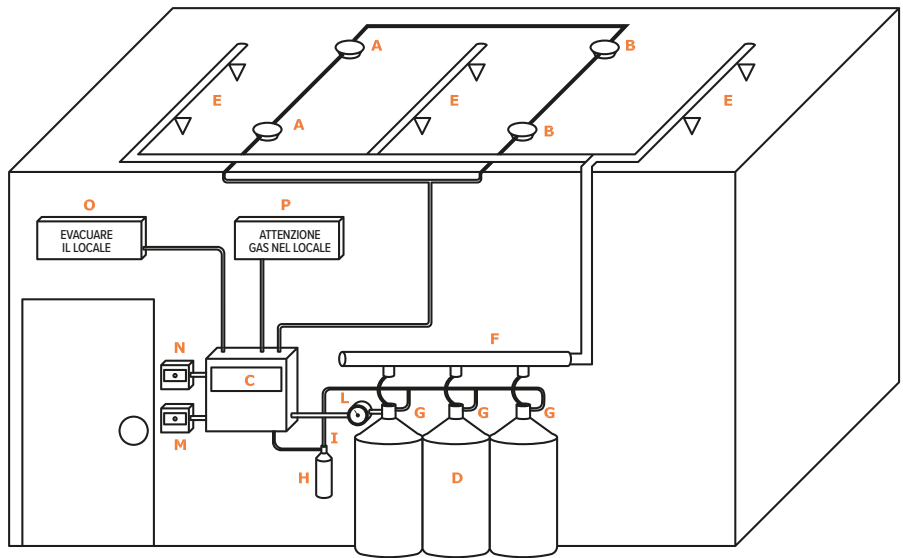
Fire extinction

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLine series fire control panel provides the system with GAS extinguisher control capabilities in compliancy with EN12094-1. SmartLetLoose/ONE enhanced control panels provide all the functions required by the applicable normative and are capable of managing all devices required for fire detection

system management (refer to "Accessory items for Fire extinction systems"). SmartLine fire extinction control panels can operate autonomously or can interface with addressable analogue control panels from the SmartLoop series by simply connecting them to the RS485 BUS of the latter (extinction stations for addressable systems).

Application diagram

LEGENDA

A Line 1 detectors.
B Line 2 detectors.
C SmartLine fire extinction control panel.
D Gas extinguisher cylinders.
E Gas release nozels
F Gas collectors.
G Pneumatic release valve.
H Pilot cylinder for gas release.
I Pilot cylinder electrovalve.
L Pressure switch.
M Manual activation button.
N Stop extinguisher gas button.
O Audio visual gas-release-imminent indicator.
P Audio visual gas-present indicator.

Application diagram.

Main features

- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Indicator LEDs (status, disabled, faults)
- Supervised terminals for manual fire extinction commands
- Supervised terminals for STOP fire extinction commands
- Supervised terminals for pressure switch control
- Supervised output for fire suppression system activation
- Supervised output for signaling activation (pre-extinguish)
- Supervised output for "Gas in area" signaling

Programming software

The SmartLeague programming and management software is intuitive and simple to use. This indispensable tool allows security professionals to control INIM fire detection systems with ease. It allows fast and easy control panel configuration and offers an overall

view of the system. It is also capable of providing detailed wiring diagrams of the system terminals in accordance with the configured settings.

ORDER CODES

SmartLine020-2	Non-expandable 2 zone conventional control panel.
SmartLine020-4	Conventional control panel with 4 zones expandable to 20.
SmartLine036-4	Conventional control panel with 4 zones expandable to 36.
SmartLine/8Z	Zone expansion board.
SmartLAN/485	Ethernet connection board.
SmartLetLoose/ONE	Fire suppression board.
SmartLetUSee/LCD-Lite	Remote-control repeater panel for SmartLine and SmartLight control panels.
SmartLeague	Programming and management software.
Link232F9F9	RS232 cable link between PC and INIM devices.
IPS24060G	Switching power supply/battery charger 1.5A@27.6Vdc.
IPS24160G	Switching power supply/battery charger 4A@27.6Vdc.
ProbeTH	Thermal probe for optimized battery charge.

Conventional detection

IRIS
CONVENTIONAL DETECTION

EN 54-7
EN 54-5
EN 54-11

FIRE ALARM AND EXTINGUISHING SYSTEMS
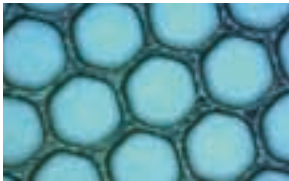
Iris

Conventional detectors

Iris series detectors maintain the ease-of-use of conventional detectors, yet are capable of providing a series of technical solutions that until today were provided by only the most sophisticated addressable analogue systems. As a result of advanced technologies based on new-generation microprocessors, these detectors implement a set of sophisticated algorithms capable of ensuring unequalled reliability and a high immunity to false alarms. The ground-breaking Versa++ technology incorporated in IRIS series detectors allows you to configure individual detectors to suit their specific environments and, when used in conjunction with the

EITK1000 kit, to connect directly to the detector line for a complete diagnosis of each detector and thus test its operating capacity, verify its real-time values, view the contamination level in the optical smoke chamber and change its sensitivity and operating mode. Each detector has a non-volatile memory which allows you to view the smoke and temperature levels measured in the period prior to the last alarm detected. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service.
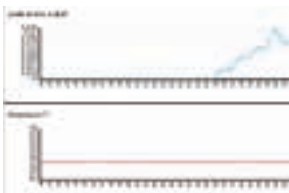
Main features

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen
- Bicolour LED: Red for alarm; Green slow flash for standby (optional) and fast flash for trouble (fault or high level of contamination in the optical smoke chamber)
- Drift compensation for sensor drift caused by dust in the chamber
- Sensitivity selection for smoke and heat (by means of EDRV1000 driver)
- Operating mode selection (by means of EDRV1000 driver for ID300 version): Only smoke; Only Heat; AND mode; OR mode; Plus mode

- Complete Diagnostics: view the contamination level in the optical chamber and verify real-time values (by means of EDRV1000)
- Memory of the smoke and temperature levels measured in the five-minute period prior to the last alarm detected
- Vast range of options (selected by means of EDRV1000 driver)
- Bypass plate on base guarantees continuity in the event of removal of the detector from the line

Insect screen

Smoke and temperature graph

Parameter	ID100	ID200	ID300
Operating voltage	10-30 Vdc		
Consumption during standby	90 uA	70 uA	90 uA
Consumption during alarm	Max 40 mA		
Sensitivity	0.08 – 0.10 – 0.12 – 0.15 dB/m	A1R (58°C + RoR) – B (72°C) – BR(72°C + RoR) – A2S (58°C)	0.08 – 0.10 – 0.12 – 0.15 dB/m A1R (58°C + RoR) – B (72°C) – BR(72°C + RoR) – A2S (58°C) Modalità AND – OR - PLUS
Operating temperature	-5°C + 40°C		
Height including base	46mm	54mm	
Diameter	110mm		
Weight (with base)	160g		
Weight (without base)	90g		

ID100 Optical smoke detector

The ID100 optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed

upper-part and 500 µm holes diameter mesh insect screen ensure high immunity to false alarms. The sensitivity can be configured to suit a wide range of applications (sensitivity configurable as: 0.08dB/m; 0.10dB/m; 0.12dB/m; 0.15dB/m).

LPCB
Cert. No. 991c

ID200 Heat detector

The response characteristics of the ID200 heat detector have been carefully set in A1R mode (fixed threshold at 58°C with thermovelocimetric detection). However, it can be set (by means of EDRV1000 driver) to operate in B mode (fixed threshold at 72°C); in A2S mode (fixed threshold

at 58°C); in BR mode (fixed threshold at 72°C with thermovelocimetric detection). As a result of such flexibility, this detector is useful in places where the environment is dusty or smoky and the risk of false alarms is high.

LPCB
Cert. No. 991e

ID300 Smoke and Heat detector

The ID300 smoke and heat detector has new smoke and temperature sensing technologies. As a result, this improved –reliability detector responds well to all types of fires (especially to fast burning blazing fires involving inflammable liquids,

which produce a limited amount of smoke) and is highly immune to false alarms. The ID300 can be set to the sensitivity mode which best suits the application (by means of EDRV1000 driver).

LPCB
Cert. No. 991a

Conventional detection

- **Plus Mode (set at factory):** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat threshold (configurable as per the ID200). Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to the maximum value. This operating mode, characterized by high sensitivity allows detection of fast burning blazing fires (for example, fires involving inflammable liquids such as alcohol).
- **OR Mode:** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat

threshold (configurable as per the ID200). This operating mode, characterized by discrete sensitivity analysis, allows the detector to sense fires with a high emission of smoke and low heat output (for example, smouldering fires) and also fires with low emission of smoke and high heat output (for example, burning chemicals).
- **AND Mode:** the detector will trigger an alarm only when the set smoke and heat thresholds (configurable as per the ID100 and ID200) are exceeded at the same time. Given the reduced response, it is necessary to evaluate the risk factor before selecting this operating mode.
- **SMOKE Mode:** the detector will operate as per the ID100.
- **HEAT Mode:** the detector will operate as per the ID200.

Black plastic and wood-look enclosures available on request for quantities.

EB0010 - Detector base
Detector base accommodates IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.

EB0020 - Relay base
elay base with a single relay which activates when the detector senses an alarm. The relay base allows you to interface the detector with intrusion control panels in domestic applications.

EB0030 - Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases, h 34 mm.

EB0040
Base protected against dripping water when tilted up to 15 degrees max.

EB0050
Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry.

EB0060*
Mounted base with integrate buzzer driven by "R" output.
* Not for Eu market.

Manual call-points

IC0020 Manual callpoint

- Manual callpoint with resettable element operated by plastic key (included).
- Warning flag and LED confirmation of activation.
- Selectable resistance.

Suitable to use with WCP0020 (transparent plastic screen against accidental activation) and FCP0020 (Plastic bracket for flush mounting, adaptable to UK single gang back box). DBCP0020 - Deep box for external pipe fitting (base h = 33mm; base + callpoint h = 57mm).

LPCB
Cert. No. 991j

IC0011E Manual callpoint for door installation (IP67)

Manual callpoint with resettable element. Weatherproof to IP67, suitable for outdoor installation.

Remote indicators

IL0010 Remote indicator

Remote fire-warning indicator.

EITK2000-ToolKit
Configuration, maintenance and diagnostics system

Front view of driver

The EIKT2000 kit also takes advantage the Versa++ technology, thanks to which it is possible to manage IRIS series conventional fire detectors and configure each one in accordance with the specific conditions of the environment in which it is to be installed. With EITK2000 it is possible to connect to a line of detectors and, for each of them, carry out a complete diagnosis to test its functionality, verify the value read in real time, read the contamination value of the optical chamber, change its sensitivity and operating mode. The kit also allows you to read the non-volatile memory, present in every detector (both Iris and Enea series), which contains a graph with the smoke and temperature concentrations measured in the period before the last alarm detected (a function aimed at assisting investigation into the causes that triggered the alarm). The

device also allows the implementation of accurate diagnoses that identify where the cable is interrupted or shorted and the carrying out of tests on the loop (walk tests) which monitor the number of communication errors, record the date and time of activation of each detector and, on completion of the operations, provide a printable professional report. The EDRV2000 driver contained in the EITK2000 kit is capable of operating autonomously by way of its internal batteries, keypad and display. However, when the driver is connected to a PC it will be powered and will charge its batteries through the USB port. The EITK2000 kit constitutes professional apparatus that the toolbox of every competent fire professional cannot be without. The kit comes in a handy case complete with 24Vdc power supply, cable and software CD.

Smoke and temperature graph
on display

EITK2000
ToolKit

* il kit comprende EDRV2000 e EITK-PWSP.

ORDER CODES

EITK2000	Kit for manual addressing, configuration, maintenance and diagnosis of systems based on IRIS and ENEA series devices.
EITK-DRV	Driver for zones with IRIS series devices or loops with ENEA series devices.
EITK-BASE	Base for IRIS and ENEA series detectors.
EITK-PWSP	Power supply for the EITK-DRV driver.

UNIVERSAL COMMUNICATOR
FOR FIRE-DETECTION SYSTEM

LIBRA
WIRELESS DETECTION

F-COM

Universal remote communicator for fire-detection systems

As required by the reference standard, all unattended fire detection and alarm systems (IRAI) must be equipped with an EN54-21 certified remote communicator.
The F-COM universal communicator, thanks to its versatility and ease of configuration, is capable sending, on activation of its input lines, voice calls (it includes a memory for voice messages configurable via audio recorder or text to speech converter), digital calls via the most widely used communication protocols and SMS texts.

Thanks to the graphic display and the intuitive user interface the F-COM communicator is easy to use, effective and adapts to any control panel of any make and model.
The F-COM is capable of remotely transmitting any condition whether alarm, fault or freely configurable via the wired Telephone line, GSM Line or 3G data line. The communicator is equipped with its own EN54-4 certified internal power supply that houses two 12V 1.2Ah batteries (not included).

Key features

- Universal communicator.
- EN54-21 and EN54-4 certified.
- IMQ certified.
- Wired landline, GSM line, 3G data line.
- Voice and digital calls, SMS sending.
- Fire Alarm call activation input.
- Fault call activation input.
- Feedback output.
- Fault output.
- N°1 configurabile output terminal.
- 3 configurable input/output channels.
- All input/output terminals fully configurable (Polarity, balancing,

programmable thresholds).
- Call activation for internal conditions (20 different configurable conditions).
- 32 contact phonebook .
- 32 configurable SMS messages.
- 100 configurable voice messages (audio file, recorder, text to speech).
- Internal events memory.
- Graphic LCD screen.
- EN54-4 certified internal power supply.
- Fully configurable from the front panel or via F-COM/STUDIO configuration software.

-30°C +70°C

F-COM Studio

The "F-COM/STUDIO" PC software can be obtained free of charge from the Inim Electronics website. This software will allow you to configure quickly and with ease all the parameters of the new communicator as well as manage a database containing all the configurations of your customers.

ORDER CODES

F-COM   Universal remote communicator for fire-detection systems.

Libra

Argus wireless solutions

The Libra wireless system offers an excellent solution for all those fire detection applications which would find a traditional hard-wired system installation to be either unfavourable or cost-inefficient, places such as: hotels, museums, churches or similar cultural sites.
The Libra is the ideal way of enhancing a traditional hard-wired analogue addressable fire detection system with wireless devices. This is done by means of a translator which allows the

control panel to manage both the translator and its devices as loop devices. The loop-powered system translator supports as many as 32 devices, it communicates with the control panel using the same protocol as the hard-wired devices.
All the commands are valid for all wireless devices: optical smoke detectors, heat detectors, multicriteria detectors, input modules, callpoints, sounders.

Features

- On site programming
- Two-way communication with the wire to wireless translator
- Programmable sensitivity
- High reliability and sensitivity

- Flexible device installation on site SW supported
- Convenience in mounting and service
- Double battery (main and secondary) guarantees a correct supply for about 5 years. The battery status is monitored by the device

Translator

● VW2W / SGCWE
● SGWE
● Wireless devices
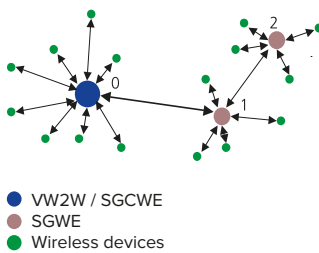
VW2W100 - Translator

Loop-powered wireless translation device. Processes signals from detectors, modules, callpoints and all wireless devices, then relays the information regarding the devices and its own status to the control panel.

SGCWE100 - Wireless translator

Stand-alone device equipped with two contacts: fault and alarm. Interfaces the Libra system to conventional control panels or any other type of system.

SGWE100 - Wireless range expander

Expands the range of the translator. Creates a microcell structure which can be configured in series in order to greatly boost the wireless range. Up to 6 Wireless range expanders can be added.

General technical characteristics	
Operational frequency	868 Mhz
Radiated power	0.01 – 5mW
Modulation type	GFSK
Frequency channel	7
Primary battery	CR123A
Secondary battery	CR2032A
Temperature	-30°C +70°C

Detectors

L-OP-SG - Wireless Optical Smoke Detector
L-MC-SG - Wireless Optical Smoke/Heat Detector
L-HT-SG - Wireless Temperature Detector
SGRBS100/L - Wireless Base Sounder
SGRBS100-AV/L - Wireless Base Sounder and Beacon

Ancillaries

SGCP100 - Wireless Callpoint
SGMI200 - Wireless Input Mmodule
SGMCB200 - Wireless Output Module - 2 outputs
CWS100 - Conventional IP65 Sounder
CWS100-AV - Conventional IP65 Sounder and Beacon IP65
SGWS-MOD - Wireless sounder interface module
SGFI100 - Wireless Alarm Repeater - Addressable

Wireless detection

VdS
G206056

EN 54-12

Linear smoke detectors

Linear smoke detectors are a very common solution in large applications (industrial buildings, large warehouses, hangars, etc.). In fact, they are a very effective method of detection on account of reflective technology which greatly reduces wiring needs. However, this approach to detection can be unreliable and difficult to maintain. INIM has managed to solve the problems of "classical" beam detection, by using an innovative self-aligning motorized beam head and an easy-to-operate controller.

| Beam detector | Controller | Mounting plate | Prism reflector | Swivel bracket | Antifog Kit |

Linear smoke detector: reflective optical beam smoke detector with a motorized head, capable of aligning itself automatically during the commissioning phase and of re-aligning itself during service. The system comprises a motorized head unit containing an infra-red transmitter and receiver, a ground level controller and prism reflector. The standard protection system covers a range of 5 to 40 meters. Range-expander kits are also available: a 40 to 80 meter kit which uses 4 reflectors and an 80 to 100 meter kit which uses 9 reflectors.
Commission: the beam alignment phase is an extremely simple procedure. In fact, the beam aligns itself on the centre of the reflector.
Adjust thresholds: the beam detector sensitivity is fully adjustable between 25 and 50% of beam obscuration.
Check contamination compensation: the beam detector automatically compensates for dust build up on the lenses. You can

check the status of the device on the display and need clean the lenses only when required.
Alarm and fault delay: the alarm delay can be set at 1 and 30 seconds (in steps of 1 second), whereas the Fault delay can be set at 1 to 60 seconds.
Change latching mode: the beam detector relays can be set to latch on alarm or auto reset depending on application requirements.
Self test: the beam detector can be tested from ground level as part of routine maintenance.
IP65: the enclosure is IP65 rated. The device is fully sealed, therefore, is suitable for installation in unfriendly (dusty or dirty) environments and can even be pressure washed.
Anti-fog kit: kit consists of a lens that you attach to the beam and a reflector that feature
a special coating that prevents condensation from forming.

Enclosure	White high heat abs UL94 HB
Enclosure rating	IP65
Operating temperature	-15°C/+55°C
Time to fault	Adjustable between 1 and 60s
Time to fire	Adjustable between 1 and 30s
Sensitivity	Fully adjustable between 25% & 50%
Operating voltage	10.2 / 30 V

Quiescent current	3 mA
Alarm current	3 mA
Alarm latching	Non latching option
Fault relay	1A @ 30 V
Fire relay	1A @ 30 V
Dimensions (WxHxD)	155x180x125 mm
Weight	Head 1kg; Controller 0.5kg

ORDER CODES

BDH110	5m-40m reflective optical beam detector. Includes: a detection unit, a control unit, reflector unit.
BDHADAPT	Mounting plate for beam head or single reflector.
70KIT 140	Range extension kit up to 80m.
140KIT 160	Range extension kit up to 100m.
FB-BRACKET	Multifunctional, adjustable bracket.
FOGKIT	BDH100 anti fog KIT.
FOGREF	Single reflector sold singularly for anti-fog kit FOGKIT.

Duct adapters
Duct application smoke detector enclosure

International standards and codes recognize the role heating and ventilation ducts play in the diffusion of smoke, toxic gases and flames throughout a building. Therefore in places where air ducts might assist the spread of flames and smoke it is necessary to take steps to safeguard the premises. One of the main aims of duct-smoke detection is to minimize the propagation of smoke and thus reduce the risk of panic, injury and even damage to property. An efficient fire detection system allows fast response and INIM's fire block range of products offers you everything you need to make you air duct system fully fire responsive.

| EBDDHN | DDHBRKTN | DDHCoverN |

EBDDHN - Universal adaptor for duct installation
Houses all types of detector (analogue or conventional). The detector base (not included) fits inside and is secured firmly in place by means of two screws (included). A practical terminal board makes wiring easy. It provides early warning of smoke by continually sampling air movement within heating and ventilation ducts in industrial and commercial buildings. Based on the Venturi principle, this device has been designed to operate with an optical smoke detector and adequate length air-sampling tube. It operates at an air velocity of between 0.5m/s to 20m/s.
TV
Air-sampling tube: the air-sampling tube is available in three different lengths: 0.6m, 1.5m, 2.8m. It should be chosen in accordance with the width of the duct concerned. The sampling tube must traverse at least 90% of the duct. If the duct is wider than 60cm, the sampling tube must traverse the entire duct.
Installation: the aluminium sampling tube can be easily shortened to adapt to the duct. The diameter of the hole for the air-sampling tube is 38mm.
Air-flow monitoring: the adaptor is fitted with a red plastic tongue which indicates the air flow to the detector and thus provides confirmation that there is no leakage and that the air flow from the duct is passing through the housing.
DDHBRKTN – Mounting bracket for circular ducts
This device fits to circular ducts and provides a flat mounting surface for the EBDDH.
DDHCOVERN – Weatherproofcover
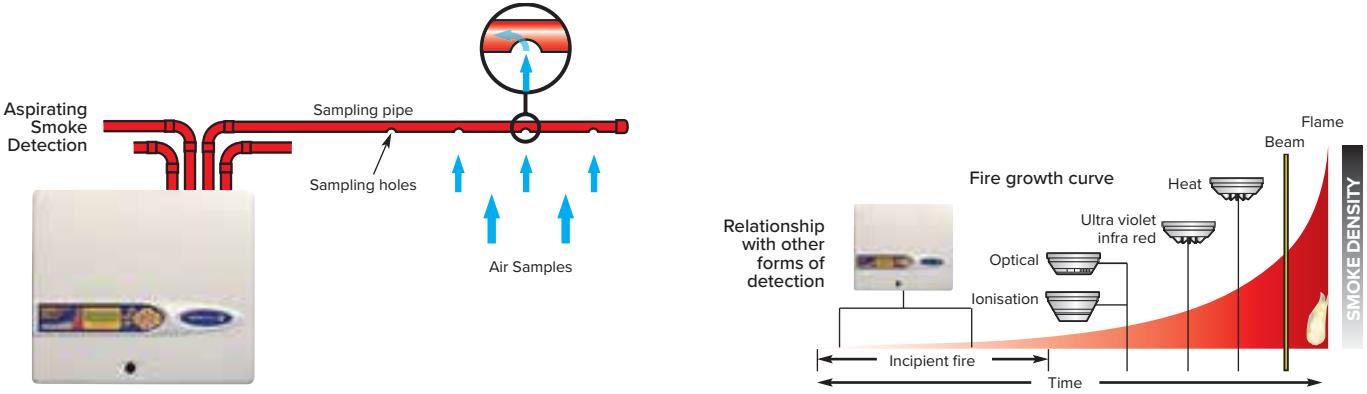This cover is required when the EBDDH unit is installed outdoors.

- Single tube air-sampling system
- New design sampling tube
- Test hole on cover on
- Easy installation
- Air flow indicator
- Filter to reduce dust and other deposits on the detector
- Efficient service and easy maintenance
- Easy mount sampling tube
- Compatible with analogue and conventional systems
- Mounting brackets for circular ducts

Technical specifications

DDH dimensions (without tube)	180x183x235 mm
DDH weight	700 g
Sampling tube length	0,6-1,5-2,8 m
Air velocity	0,5/20 ms

ORDER CODES

EBDDHN	Universal tube adaptor.
TV06N	0.6m sampling tube.
TV15N	1.5m sampling tube.
TV28N	2.8m sampling tube.
DDHBRKTN	Mounting bracket for circular ducts.
DDHCOVERN	Weathertight cover.
DDH204	Set of spare gaskets on.
DDH F1/10	Anti-dust filter

Smoke aspirating systems

Aspirating Smoke Detection

Sampling pipe

Sampling holes

Air Samples

Relationship with other forms of detection

Fire growth curve

Optical

Ionisation

Incipient fire

Ultra violet infra red

Heat

Flame Beam

Time

SMOKE DENSITY

Stratos aspirating systems provide the very earliest warning of fire. They are capable of drawing air through sampling pipes to a three-dimensional laser chamber with a removable filter cartridge. The pipe length can be between 50m to 100m long, depending on the model and the level of sensitivity required. The laser technology embedded in Stratos is capable of discriminating smoke from nuisance particles such as dust. This capability allows the system to reduce the false alarm rate yet still provide warning at the first trace of smoke, a feature which is particularly useful in applications that require extremely high sensitivity. One of the most important features of the system is its capacity to self-calibrate, this feature determines the maximum sensitivity and reliability for the protected environment. Stratos is equipped with a connector for RS485 line management for networked system purposes, or for data communications to remote sites. Useful relay outputs (Aux, Pre-alarm, fire 1, fire 2) allow Stratos to operate with both conventional and analogue fire-detection systems. Stratos offers a comprehensive range of models with various features such as sampling pipes with several inlets, keypad and display and remote status indicator. These aspirating systems have been designed to operate with

traditional fire detection systems, therefore, they integrate with no problem in systems where multipoint and linear detectors are scarce. Stratos is capable of providing the very highest levels of sensitivity in environments such as computer and electrical rooms. In order to meet the demands of such applications, Stratos offers a series of devices which facilitate protection and provide warning at the slightest trace of smoke.
Seconds count in fire detection but so do maintenance costs and Stratos is a winner on both counts. As a result of the low-maintenance requirements of Stratos systems, they find their niche in environments where maintenance and inspection are often difficult or costly, such as in false ceilings and or floating floors. The removable filter cartridge allows field serviceability even in the dirtiest of environments and is just one of the many features that make these systems advantageous and cost-efficient. Different sensitivity and intervention thresholds can be obtained by simply adding or taking away air-flow inlets along the sample pipes. Such high-sensitivity coupled with advanced processing allow Stratos to be employed even in the most demanding applications.
Stratos is supplied with PIPECAD programming facilities as standard.

Stratos Micra 10

The highly reliable Micra 10 is a compact, installation-friendly aspiration system capable of detecting smoke at the incipient stage of fire. The "Classifire" algorithm implemented inside is capable of automatically optimizing the sensitivity

of the detector to suit the environment where it is installed, thus eliminating the need for complex calibration operations. Thanks to its output relays (dry contacts) this device is compatible with all fire detection system.

Technical specifications

- Power Supply voltage: 21.6V - 26.4V DC
- Consumption: 250mA @ 24V DC
- Dimensions: 145W x 220H x 90D
- Weight: 1.7 kg
- Operating temperature: -10 to + 60 ° C (EN54 Part 20)
- Humidity: 0 - 90% non-condensing
- Sensitivity: 0.03% to 25% obs/m
- Detection technology: Laser
- Detected particles: 0.0003µm to 10µm

- Dust discrimination system: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length: 50m
- Sample pipe diameter: 3/4 "(27mm)
- Maximum number of sampling holes: 10
- Detection levels: Alarm, Early warning
- On-board relays: Early warning, Alarm, Fault
- IP rating: IP50
- Pipe inlet: 1
- Exhaust pipe to expel the sampled air: 1

Stratos Micra 25

Micra 25 maintains all the distinctive features of Stratos (ClassiFire® Perceptive Artificial Intelligence Dual TechnologyLDD 3D3). Micra 25 is the most cost-efficient way of creating a laser-based aspirating system. In fact, it is capable of drawing air from the protected area through a sampling

pipe of up to 50m long. Micra 25 is suitable for installation in small applications or rooms which require individual incipient fire reporting. This device is equipped with an RS485 which allows the connection of several devices in a network. Supplied complete with PIPECAD software.
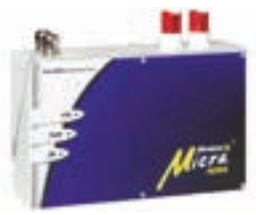

LPCB
Cert. No. 1199d

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 250mA @ 24V DC
- Dimensions: 140W x 200H x 85D
- Weight: 1.7kg
- Operating temperature range: - 10 to +38°C (UL268) /-10 to + 60°C (CEA4022)
- Operating humidity range: 0 - 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015%
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003µ to 10µ.
- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD).

- Maximum sampling pipe length in a high-airflow environment: 25m
- Maximum sampling pipe length in a static-air environment: 50m
- Sampling pipe diameter: 3/4" (27mm O/D)
- Sampling holes: 10
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- RS485 Network data bus
- Maximum BUS length: 1.2 km
- Cabinet rating: IP50

Stratos Micra 100

Micra 100 is suitable for small to medium applications. It is capable of drawing air from the protected area through two sampling pipes for

a total length of 100m. Supplied complete with PIPECAD software.

LPCB
Cert. No. 1199d

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 400mA @ 24V DC
- Dimensions: 300W x 220H x 85D
- Weight: 3.8kg
- Operating temperature range: -10 to +38°C (UL268) /-10 to + 60°C (CEA4022)
- Operating humidity range: 0 - 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015% obscuration per meter
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003µ to 10µ

- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length in a high-airflow environment: 50mt
- Maximum sampling pipe length in a static-air environment: 100mt
- Sampling pipe diameter: 3/4" (27mm O/D)
- Sampling holes: 25 x pipe
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- Network data bus: RS485
- Maximum BUS length: 1.2 km
- Cabinet rating: IP50

Stratos HSSD2

Stratos HSSD is capable of drawing air from the protected area through four sampling pipes of up to 100m each, for a maximum total length of 200m. It is equipped with keypad and display and provides information regarding system operating status and eventual alarm conditions.Supplied complete with PIPECAD software.

LPCB
Cert. No. 1199d

Technical specifications

- Supply voltage: 21.6V - 26.4V DC
- Current consumption: 450mA @ 24V DC (aspiration velocity=8)
- Dimensions: 427W x 372H x 95D
- Weight: 5.2kg
- Operating temperature range: -10 to +38°C (UL268) /-10 to + 60°C (CEA4022)
- Operating humidity range: 0 - 90% non-condensing
- Detection range: (%Obs/m) 0.0015% to 25%
- Maximum smoke opacity: 0.0015% obscuration per meter
- Detection technology: laser light scattering mass detection and particle evaluation
- Sensitivity: 0.003µ to 10µ

- Dust Discrimination: 3D3 Laser Dust Discrimination (LDD)
- Maximum sampling pipe length 100m
- Maximum total pipe length: 200m @ 80 holes 200 m @ 100 holes
- Sampling pipe diameter: 3/4" (27mm O/D)
- Sampling holes: 25 x pipe
- Alarm levels: 4 (Aux, Pre-alarm, Fire 1 and Fire 2)
- Laser sampling chamber life: 10 years
- Laser system life (MTTF): 1000 years
- Up/Download serial port: RS232/RS485
- Network data bus: RS485
- Maximum BUS length: 1.2 km
- Cabinet rating: IP50

ORDER CODES

IN30725	Aspirating system Stratos Nano.
IN30621	Aspirating system HSSD 2.
IN30671	Aspirating system Micra25.
IN30672	Aspirating system Micra100.
IN30436	Relay board for stratos micra.
IN30755	Dust filter for Stratos Micra.
IN30699	Dust filter for Stratos HSSD2.

Sampling pipes

CM 10900 - Sampling pipe (3/4") Red - 3 metres.
CM 10908 - Coupling sleeve Red.
CM 10906 - 90° Curve Red.
CM 10905 - 45° Curve Red.
CM 10927 - Tube end cap Red.
CM 10909 - 'T' Junction Red.
CM 10925 - Sample point (flexible tube with sample point).
CM10954 - Pipe Support (replace CM10930).
CM10960 - Labels for holes location (100 pcs).

Flame detectors

Technical specifications

Power Supply	14-30 Vdc
Power Consumption	MAX 30 mA
IP Rating	IP65
Sensitivity Class	1 according to EN54-10
Output signals	Alarm relay, Fault relay

IR^2 Flame detector

Dual infra red flame detector, designed to protect areas where open fires may be expected.

016581 - IR^2 Flame detector.
016571 - IR^2 Flame detector Intrinsecally Safe.
016511 - IR^2 Flame detector in explosion proof enclosure.

IR^3 Flame detector

Triple infra red flame detector, designed to protect areas where open fires may be expected. Suitable for outdoor area protection.

016589 - IR^3 Flame detector.
016579 - IR^3 Flame detector Intrinsecally Safe.
016519 - IR^3 Flame detector in explosion proof enclosure.

IR^2/UV Flame detector

Ultra Violet, dual infra-red flame detector, designed to protect areas where open fires may be expected, Hi false alarm rejection.

016591 - UV/IR^2 Flame Detector.
016521 - UV/IR^2 Flame detector in explosion proof enclosure.

Mounting Brackets

007127 - Adjustable Mounting Bracket Stainless Steel.

012545 - Stainless Steel Weather Shield.

007279 - Stainless Steel Weather Shield For Exd Housings.

Thermosensitive cables

On account of their reliability, performance, ease-of-use and reduced-cost, linear heat detectors are appropriate for all types of installations with a provision for detection by way of temperature control. Linear heat detectors are also suitable for installation in explosive atmospheres (classified areas), when equipped with

devices capable of limiting the supply voltage (for example, intrinsic linear barrier).
Thermosensitive cables fall into 4 categories determined by the external sleeve. Each of the four categories is further divided into sub-categories determined by the alarm temperature.

EPC type cable with durable vinyl outer racket. Intended for use in commercial and industrial applications.
Good resistance to common chemicals.

Model	Alarm Temperature	Installation Temperature	Certification
EPC155	68°C	40 ÷ +38° C	UL, FM
EPC190	88°C	-40 ÷ +66°C	FM
EPC220	105°C	-40 ÷ +79°C	UL, FM
EPC280	138°C	-40 ÷ +93°C	UL, FM
EPC356	180°C	-40 ÷ +105°C	UL, FM

XLT type cable with proprietary flame retardant polymer outer jacket. Intended for use in cold storage facilities and applications that require a low alarm activation temperature such as railway and motorway tunnels.

Model	Alarm Temperature	Installation Temperature	Certification
XLT135	57°C	-57 ÷ +38°C	UL, FM

XCR type cable with durable flouropolymer outer racket. Good resistance to common chemicals and acids.

Model	Alarm Temperature	Installation Temperature	Certification
XCR155	68°C	-40 ÷ +38°C	UL, FM
XCR190	88°C	-40 ÷ +66°C	UL, FM
XCR220	105°C	-40 ÷ +79°C	FM
XCR280	138°C	-40 ÷ +93°C	UL, FM
XCR356	180°C	-40 ÷ +121°C	UL, FM

Industrial gas detector series
ING7/INE7

The detectors from the INDUSTRIAL series are manufactured using the most modern reflow and SMT construction techniques.
They use the latest generation of microprocessor technology to deliver fast response and ensure accuracy and reliability.
The sensitive element is connected to an interchangeable device component which allows installers to replace the sensor cap (the part susceptible to wear and tear) without needing to recalibrate the device. The complete product line includes a wide array gas

leak detectors, all available in explosionproof or dustproof enclosures to satisfy even the most exacting requirements.
During the installation phase or maintenance sessions, you can interface INDUSTRIAL series detectors with a PC or Android Smartphone (via an INA55-701 interface in order to configure the parameters, change the intervention thresholds, check the gas-level readings and/or simulate alarm, pre-alarm and fault conditions.

Detector specifications

- Selectable delays from 0 to 240 seconds for each individual threshold.
- Reading compensation system in accordance with ambient temperature.
- Replacement of sensor cap directly on-site without need

of titrated gas canisters.
- Connection to PC or Android SmartPhone (via INA55-700 interface) for threshold, filter and delay settings, real-time Value Readings and simulation of alarm, pre-alarm and fault conditions.

ING7 - Detector in IP55 enclosure
Detector housed in an IP55 protection rated dustproof metal enclosure.
The sensitive element is located on the underside of the detector and is protected by stainless steel mesh. The sensor cap can be easily and

cost-efficiently replaced at the end of its functional life (3 years in favourable environments with no polluting agents) without any need of dismantling the detector.

INE7 - Detector in explosionproof enclosure
II 2G Ex d IIC T6 ATEX certified detector in explosionproof enclosure; the electronic circuitry housing is made from diecast aluminium suitable for installation in classified areas.
The sensitive element is housed in an AISI 303 stainless steel, chromed brass enclosure, coated with approved resin and is located on the

underside of the aluminium enclosure.
The sensitive element is protected by a synthesized steel powder disc. The sensor cap can be easily and cost-efficiently replaced at the end of its functional life (3 years in favourable environments with no polluting agents) without any need of dismantling the detector.

INE7T - Detector in explosionproof enclosure with LCD display touchscreen
As the INE7 version, this model is 2G Ex d IIC T6 ATEX certified detector in explosionproof enclosure but with an LCD display touchscreen. This allows to maintain, test and supervise the detector without opening it, which is crucial for

safety in hazardous area. All the calibration and verification operations are available without any connection with external equipments and can be carried on with explotionproof enclosure closed and in safe conditions.

Orders for Detectors must specify not only the type of enclosure, but also the type of gas, the technology of the sensitive element and the

type of output interface. Following is a schematic representation of the order codes.

IN Suffix	IN
G = IP55 enclosure / E = ATEX enclosure	h
Industrial series (7)	7
Type of GAS (see table 1)	nn

Detector technology (see table 2)	t
Display LCD touchscreen	T
Hyphen	-
Type of interface (see table 3)	ii

Table 1

Code nn	Gas detected	Pre-set Pre-alarm/Alarm thresholds	Range
00	Methane (CH4)	15/30 % L.I.E.	0 - 100% L.I.E.
01C/01P	Special Gas (see Order Code Table)	15/30 % L.I.E.	0 - 100% L.I.E.
01H	Nitrogen dioxide (NO2)	5 / 10 ppm	0 - 20 ppm
01R	Carbon dioxide (CO2) / Butane (C4H10)	1000 / 2000 ppm, 4000 / 8000 ppm 10000 / 20000 ppm	0 - 10000 ppm 0 - 30000 ppm
02	Petrol fumes	15/30 % L.I.E.	0 - 100% L.I.E.
03	Carbon monoxide (CO)	100 / 200 ppm	0 - 500 ppm
04	Hydrogen (H2)	15/30 % L.I.E.	0 - 100% L.I.E.
05	LPG (Liquid Petroleum Gas)	15/30 % L.I.E.	0 - 100% L.I.E.
06	Propane	15/30 % L.I.E.	0 - 100% L.I.E.
07	Ammonia (NH3)	100 / 200 ppm	0 - 500 ppm
08	Ammonia (NH3)	1000 / 2000 PPM	0 - 2000 ppm
09	Acetylene	15/30 % L.I.E.	0 - 100% L.I.E.
10	Oxygen (Excess)	24% / 27%	21 - 42% volume
11	Oxygen (Lack)	18% / 15%	21 - 0% volume

Table 2

Code t	Technology of sensitive element of detector
S	Semiconductor
C	Catalytic
P	Pellistor
H	Electrochemical cell
IR	Infrared

Table 3

Code ii	Type of interface
RL	3 Relays (Alarm, Pre-alarm and fault)
AS-C	Connection with conventional line (provides Pre-alarm, Alarm, Fault signalling. One detector only per line)
AS-M	Connection for addressable Input module - Inim model EM312SR
42	4-20 mA module
LE	Direct connection to Inim Loop
MB	MODBUS

Order code table

Detector with Semiconductor sensitive element In IP55 enclosure — Suitable for environments with clean and dry air

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	ING700S-42	ING700S-RL	ING700S-AS-M	ING700S-AS-C	ING700S-LE	ING700S-MB	INRG-700S
LPG	ING705S-42	ING705S-RL	ING705S-AS-M	ING705S-AS-C	ING705S-LE	ING705S-MB	INRG-705S
Propane	ING706S-42	ING706S-RL	ING706S-AS-M	ING706S-AS-C	ING706S-LE	ING706S-MB	INRG-706S
Ammonia (500 PPM)	ING707S-42	ING707S-RL	ING707S-AS-M	ING707S-AS-C	ING707S-LE	ING707S-MB	INRG-707S
Ammonia (2000 PPM)	ING708S-42	ING708S-RL	ING708S-AS-M	ING708S-AS-C	ING708S-LE	ING708S-MB	INRG-708S

Detector with Semiconductor sensitive element In ATEX enclosure — Suitable for environments with clean and dry air

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	INE700S-42	INE700S-RL	INE700S-AS-M	INE700S-AS-C	INE700S-LE	INE700S-MB	INRE-700S
LPG	INE705S-42	INE705S-RL	INE705S-AS-M	INE705S-AS-C	INE705S-LE	INE705S-MB	INRE-705S
Propane	INE706S-42	INE706S-RL	INE706S-AS-M	INE706S-AS-C	INE706S-LE	INE706S-MB	INRE-706S
Ammonia (500 PPM)	INE707S-42	INE707S-RL	INE707S-AS-M	INE707S-AS-C	INE707S-LE	INE707S-MB	INRE-707S
Ammonia (2000 PPM)	INE708S-42	INE708S-RL	INE708S-AS-M	INE708S-AS-C	INE708S-LE	INE708S-MB	INRE-708S

Detectors with sensitive catalytic element In IP55 enclosure — Suitable for environments with light pollution

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	ING700C-42	ING700C-RL	ING700C-AS-M	ING700C-AS-C	ING700C-LE	ING700C-MB	INRG-700C
Special Gases*	ING701C-42	ING701C-RL	ING701C-AS-M	ING701C-AS-C	ING701C-LE	ING701C-MB	INRG-701C
Petrol fumes	ING702C-42	ING702C-RL	ING702C-AS-M	ING702C-AS-C	ING702C-LE	ING702C-MB	INRG-702C
Hydrogen	ING704C-42	ING704C-RL	ING704C-AS-M	ING704C-AS-C	ING704C-LE	ING704C-MB	INRG-704C
LPG	ING705C-42	ING705C-RL	ING705C-AS-M	ING705C-AS-C	ING705C-LE	ING705C-MB	INRG-705C
Propane	ING706C-42	ING706C-RL	ING706C-AS-M	ING706C-AS-C	ING706C-LE	ING706C-MB	INRG-706C
Acetylene	ING709C-42	ING709C-RL	ING709C-AS-M	ING709C-AS-C	ING709C-LE	ING709C-MB	INRG-709C

Detectors with sensitive catalytic element In ATEX enclosure — Suitable for environments with light pollution

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	INE700C-42	INE700C-RL	INE700C-AS-M	INE700C-AS-C	INE700C-LE	INE700C-MB	INRE-700C
Special Gases*	INE701C-42	INE701C-RL	INE701C-AS-M	INE701C-AS-C	INE701C-LE	INE701C-MB	INRE-701C
Petrol fumes	INE702C-42	INE702C-RL	INE702C-AS-M	INE702C-AS-C	INE702C-LE	INE702C-MB	INRE-702C
Hydrogen	INE704C-42	INE704C-RL	INE704C-AS-M	INE704C-AS-C	INE704C-LE	INE704C-MB	INRE-704C
LPG	INE705C-42	INE705C-RL	INE705C-AS-M	INE705C-AS-C	INE705C-LE	INE705C-MB	INRE-705C
Propane	INE706C-42	INE706C-RL	INE706C-AS-M	INE706C-AS-C	INE706C-LE	INE706C-MB	INRE-706C
Acetylene	INE709C-42	INE709C-RL	INE709C-AS-M	INE709C-AS-C	INE709C-LE	INE709C-MB	INRE-709C

Detectors with pellistor sensitive element In IP55 enclosure — Suitable for polluted environments

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	ING700P-42	ING700P-RL	ING700P-AS-M	ING700P-AS-C	ING700P-LE	ING700P-MB	INRG-700P
Special Gases*	ING701P-42	ING701P-RL	ING701P-AS-M	ING701P-AS-C	ING701P-LE	ING701P-MB	INRG-701P
Petrol fumes	ING702P-42	ING702P-RL	ING702P-AS-M	ING702P-AS-C	ING702P-LE	ING702P-MB	INRG-702P
Hydrogen	ING704P-42	ING704P-RL	ING704P-AS-M	ING704P-AS-C	ING704P-LE	ING704P-MB	INRG-704P
LPG	ING705P-42	ING705P-RL	ING705P-AS-M	ING705P-AS-C	ING705P-LE	ING705P-MB	INRG-705P
Propane	ING706P-42	ING706P-RL	ING706P-AS-M	ING706P-AS-C	ING706P-LE	ING706P-MB	INRG-706P
Acetylene	ING709P-42	ING709P-RL	ING709P-AS-M	ING709P-AS-C	ING709P-LE	ING709P-MB	INRG-709P

* Special gases list (verify if available):
Methanol (methyl alcohol), Pentane, Heptane, Ethyl acetate, Ethylene, Ethanol (Ethyl alcohol), Butane, Exane, iso-Butane.

INDUSTRIAL GAS DETECTOR SERIES
GAS DETECTION

Detector with pellistor sensitive element In ATEX enclosure — Suitable for polluted environments

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Metano	INE700P-42	INE700P-RL	INE700P-AS-M	INE700P-AS-C	INE700P-LE	INE700P-MB	INRE-700P
Gas speciali*	INE701P-42	INE701P-RL	INE701P-AS-M	INE701P-AS-C	INE701P-LE	INE701P-MB	INRE-701P
Vapori di benzina	INE702P-42	INE702P-RL	INE702P-AS-M	INE702P-AS-C	INE702P-LE	INE702P-MB	INRE-702P
Idrogeno	INE704P-42	INE704P-RL	INE704P-AS-M	INE704P-AS-C	INE704P-LE	INE704P-MB	INRE-704P
GPL	INE705P-42	INE705P-RL	INE705P-AS-M	INE705P-AS-C	INE705P-LE	INE705P-MB	INRE-705P
Propano	INE706P-42	INE706P-RL	INE706P-AS-M	INE706P-AS-C	INE706P-LE	INE706P-MB	INRE-706P

Detector with pellistor sensitive element In ATEX enclosure with lcd touchscreen display — Suitable for polluted environments

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	INE700PT-42	INE700PT-RL	INE700PT-AS-M	INE700PT-AS-C	INE700PT-LE	INE700PT-MB	INRE-700P
Special Gases*	INR701PT-42	INE701PT-RL	INE701PT-AS-M	INE701PT-AS-C	INE701PT-LE	INE701PT-MB	INRE-701P
Petrol fumes	INE702PT-42	INE702PT-RL	INE702PT-AS-M	INE702PT-AS-C	INE702PT-LE	INE702PT-MB	INRE-702P
Hydrogen	INE704PT-42	INE704PT-RL	INE704PT-AS-M	INE704PT-AS-C	INE704PT-LE	INE704PT-MB	INRE-704P
LPG	INE705PT-42	INE705PT-RL	INE705PT-AS-M	INE705PT-AS-C	INE705PT-LE	INE705PT-MB	INRE-705P
Propane	INE706PT-42	INE706PT-RL	INE706PT-AS-M	INE706PT-AS-C	INE706PT-LE	INE706PT-MB	INRE-706P
Acetylene	INE709PT-42	INE709PT-RL	INE709PT-AS-M	INE709PT-AS-C	INE709PT-LE	INE709PT-MB	INRE-709P

Detectors with Electrochemical Cell type sensitive element In IP55 enclosure — Suitable for toxic gas detection (measuring in ppm)

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Nitrogen dioxide	ING701H-42	ING701H-RL	ING701H-AS-M	ING701H-AS-C	ING701H-LE	ING701H-MB	INRG-701H
Carbon monoxide	ING703H-42	ING703H-RL	ING703H-AS-M	ING703H-AS-C	ING703H-LE	ING703H-MB	INRG-703H
Carbon monoxide EN50545	ING703HPK-42	ING703HPK-RL	ING703HPK-AS-M	ING703HPK-AS-C	ING703HPK-LE	ING703HPK-MB	INRG-703HPK
Ammonia (500 PPM)	ING707H-42	ING707H-RL	ING707H-AS-M	ING707H-AS-C	ING707H-LE	ING707H-MB	INRG-707H
Ammonia (2000 PPM)	ING708H-42	ING708H-RL	ING708H-AS-M	ING708H-AS-C	ING708H-LE	ING708H-MB	INRG-708H
Oxygen (Excess)	ING710H-42	ING710H-RL	ING710H-AS-M	ING710H-AS-C	ING710H-LE	ING710H-MB	INRG-710H
Oxygen (Defect)	ING711H-42	ING711H-RL	ING711H-AS-M	ING711H-AS-C	ING711H-LE	ING711H-MB	INRG-711H

Detectors with Electrochemical Cell type sensitive element In ATEX enclosure — Suitable for toxic gas detection (measuring in ppm)

	42	RL	AS-M	LE	MB	Replacement sensor	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	Direct connection to INIM loops	For MODBUS connection		
Nitrogen dioxide	INE701H-42	INE701H-RL	INE701H-AS-M	INE701H-LE	INE701H-MB	INRE-701H	INRE-700S
Carbon monoxide	INE703H-42	INE703H-RL	INE703H-AS-M	INE703H-LE	INE703H-MB	INRE-703H	INRE-704S
Ammonia (500 PPM)	INE707H-42	INE707H-RL	INE707H-AS-M	INE707H-LE	INE707H-MB	INRE-707H	INRE-705S
Ammonia (2000 PPM)	INE708H-42	INE708H-RL	INE708H-AS-M	INE708H-LE	INE708H-MB	INRE-708H	INRE-706S
Oxygen (Excess)	INE710H-42	INE710H-RL	INE710H-AS-M	INE710H-LE	INE710H-MB	INRE-710H	INRE-707S
Oxygen (Defect)	INE711H-42	INE711H-RL	INE711H-AS-M	INE711H-LE	INE711H-MB	INRE-711H	INRE-708S

* Special gases list (verify if available):
Methanol (methyl alcohol), Pentane, Heptane, Ethyl acetate, Ethylene, Ethanol (Ethyl alcohol), Butane, Exane, iso-Butane.

Detectors with Electrochemical Cell type sensitive element In ATEX enclosure with lcd touchscreen display — Suitable for toxic gas detection (measuring in ppm)

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Nitrogen dioxide	INE701HT-42	INE701HT-RL	INE701HT-AS-M	INE701HT-AS-C	INE701HT-LE	INE701HT-MB	INRE-701H
Carbon monoxide	INE703HT-42	INE703HT-RL	INE703HT-AS-M	INE703HT-AS-C	INE703HT-LE	INE703HT-MB	INRE-703H
Ammonia (500 PPM)	INE707HT-42	INE707HT-RL	INE707HT-AS-M	INE707HT-AS-C	INE707HT-LE	INE707HT-MB	INRE-707H
Ammonia (2000 PPM)	INE708HT-42	INE708HT-RL	INE708HT-AS-M	INE708HT-AS-C	INE708HT-LE	INE708HT-MB	INRE-708H
Oxygen (Excess)	INE710HT-42	INE710HT-RL	INE710HT-AS-M	INE710HT-AS-C	INE710HT-LE	INE710HT-MB	INRE-710H
Oxygen (Defect)	INE711HT-42	INE711HT-RL	INE711HT-AS-M	INE711HT-AS-C	INE711HT-LE	INE711HT-MB	INRE-711H

Detectors with infrared sensitive element In IP55 enclosure — Suitable for selective measure of specific gases

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	ING700IR-42	ING700IR-RL	ING700IR-AS-M	ING700IR-AS-C	ING700IR-LE	ING700IR-MB	INRG-700IR
Carbon Dioxide / Butane **	ING701IR-42	ING701IR-RL	ING701IR-AS-M	ING701IR-AS-C	ING701IR-LE	ING701IR-MB	INRG-701IR
LPG	ING705IR-42	ING705IR-RL	ING705IR-AS-M	ING705IR-AS-C	ING705IR-LE	ING705IR-MB	INRG-705IR
Propane	ING706IR-42	ING706IR-RL	ING706IR-AS-M	ING706IR-AS-C	ING706IR-LE	ING706IR-MB	INRG-706IR

Detectors with infrared sensitive element In ATEX enclosure — Suitable for selective measure of specific gases

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	INE700IR-42	INE700IR-RL	INE700IR-AS-M	INE700IR-AS-C	INE700IR-LE	INE700IR-MB	INRE-700IR
Carbon Dioxide / Butane **	INE701IR-42	INE701IR-RL	INE701IR-AS-M	INE701IR-AS-C	INE701IR-LE	INE701IR-MB	INRE-701IR
LPG	INE705IR-42	INE705IR-RL	INE705IR-AS-M	INE705IR-AS-C	INE705IR-LE	INE705IR-MB	INRE-705IR
Propane	INE706IR-42	INE706IR-RL	INE706IR-AS-M	INE706IR-AS-C	INE706IR-LE	INE706IR-MB	INRE-706IR

Detectors with infrared sensitive element In ATEX enclosure with lcd touchscreen display — Suitable for selective measure of specific gases

	42	RL	AS-M	AS-C	LE	MB	Replacement sensor
	4-20 mA	Relay	For connection to INIM addressable modules	For connection to SmartLine conventional control panels	Direct connection to INIM loops	For MODBUS connection	
Methane	INE700IRT-42	INE700IRT-RL	INE700IRT-AS-M	INE700IRT-AS-C	INE700IRT-LE	INE700IRT-MB	INRE-700IR
Carbon Dioxide / Butane **	INE701IRT-42	INE701IRT-RL	INE701IRT-AS-M	INE701IRT-AS-C	INE701IRT-LE	INE701IRT-MB	INRE-701IR
LPG	INE705IRT-42	INE705IRT-RL	INE705IRT-AS-M	INE705IRT-AS-C	INE705IRT-LE	INE705IRT-MB	INRE-705IR
Propane	INE706IRT-42	INE706IRT-RL	INE706IRT-AS-M	INE706IRT-AS-C	INE706IRT-LE	INE706IRT-MB	INRE-706IR

** To be specified in the order:
- Detectable gas type (Carbon Dioxide or Butane)
- Threshold for Carbon Dioxide (1000 / 2000ppm, 4000 / 8000ppm or 10000 / 20000ppm)
- Measuring range for Carbon Dioxide (0 - 10000ppm or 0 - 30000 ppm)

Gas detection

Technical Specifications

Operating voltage		11 – 30 Vdc
Standby current draw	Semiconductor sensors	50 mA
	Catalytic sensors	70 mA
	Electrochemical sensors	30 mA
Current draw in Alarm status	Semiconductor sensors	80 mA
	Catalytic sensors	100 mA
	Electrochemical sensors	60 mA
Operating temperature		from -0 to +40 °C
Weight	IP55 enclosure	370 g
	ATEX enclosure	1000g
Dimensions	IP55 enclosure	141x100x60 mm
	ATEX enclosure	165x90x80 mm
Maximum ambient air speed in the protected ambient		10 m/S

Accessory items

INA55-701 - Gas detector to Android SmartPhone interface
Interfaces the gas detector to a smartphone with Android operative system, allows you to read and change the detector parameters and simulate pre-alarm, alarm and fault status. Complete with CD containing the required app.
INB55 - 1 litre tester canister for gas detectors
Functionality tester for gas detectors, to be used by qualified persons only, sufficient for approximately 8 tests.
INA55-104 - Valve for test cylinders
INA55-108 - Cup for test aerosol delivery
INA55-109 - Inox steel mounting bracket for ATEX standard detectors (without display)
INA55-110 - Valve with Flowmeter

Disposable canisters	Gas
INB55-100	Propane 20% L.E.L., suitable for LPG detectors also
INB55-101	Propane 40% L.E.L., suitable for LPG detectors also
INB55-102	Methane 20% L.E.L.
INB55-103	Methane 40% L.E.L.
INB55-104	Hydrogen 20% L.E.L.
INB55-105	Hydrogen 40% L.E.L.
INB55-106	Acetylene 20% L.E.L.
INB55-107	Acetylene 40% L.E.L.
INB55-108	Carbon monoxide, 100 p.p.m.
INB55-109	Carbon monoxide, 200 p.p.m.
INB55-110	Oxygen 27% volume
INB55-111	Isobutane 20% L.E.L., suitable for petrol fumes detectors also
INB55-112	Isobutane 40% L.E.L., suitable for petrol fumes detectors also
INB55-113	Oxygen 15% volume

Elite gas detector series
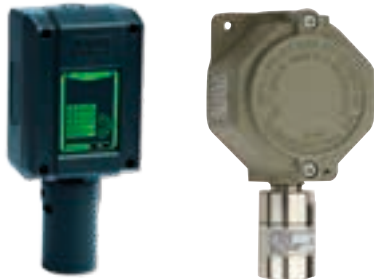
The detectors from the ELITE series represent excellence in the field of gas detection, the multiple technologies available (catalytic, pellistor, electrochemical or infrared sensitive elements), the wide range of detectable gases, the ease-of-use and trouble-free maintenance combined with the quality and reliability that distinguish these devices makes the ELITE series a unique product range of its kind. Two buttons on-board each detector (F1 and F2) allow you to carry out tool-free calibration and maintenance operations. Trouble-free maintenance allows you to directly replace the cartridge with the sensitive element without need of calibration. The detectors are available in either IP55 or explosionproof enclosures for use in potentially explosive areas (II 2 G Ex d IIC T6 Gb).

Gas detected	Sensitive element technology	3 relay OUTPUT + fault and 4-20 mA		4-20 mA module		Measuring Range	Replacement cartridge		Calibration canister	Years*
		IP55	ATEX	IP55	ATEX		IP55	ATEX		
Methane	CATALYTIC	SE237KM	SE138KM	TS282KM	TS293KM	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	SE237PM	SE138PM	TS282PM	TS293PM	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	INFRARED				TS293IM	0 - 100% LIE			BO200	
GPL	CATALYTIC	SE237KG	SE138KG	TS282KG	TS293KG	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	SE237PG	SE138PG	TS282PG	TS293PG	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	INFRARED				TS293IG	0 - 100% LIE			BO200	
Hydrogen	CATALYTIC	SE237KI	SE138KI	TS282KI	TS293KI	0 - 20% LIE	ZSK02	ZSK02/EX	BO200	5
	PELLISTOR	SE237PI	SE138PI	TS282PI	TS293PI	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
Petrol fumes	CATALYTIC	SE237KB	SE138KB	TS282KB	TS293KB	0 - 20% LIE	ZSK04	ZSK04/EX	BO200	5
	PELLISTOR	SE237PB	SE138PB	TS282PB	TS293PB	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
Ammonia	ELECTROCHEMICAL	SE237EA	SE138EA	TS282EA	TS293EA	0 - 300 ppm	ZSEA1	ZSEA1/EX	BO501	3
	ELECTROCHEMICAL	SE237EA-H	SE138EA-H	TS282EA-H	TS293EA-H	0 - 300 ppm			BO501	
Carbon monoxide	ELECTROCHEMICAL	SE237EC-S	SE138EC-S	TS282EC-S	TS293EC-S	0 - 300 ppm	ZSEC1	ZSEC1/EX	BO210	3
	ELECTROCHEMICAL	SE237EC-H	SE138EC-H	TS282EC-H	TS293EC-H	0 - 300 ppm		ZSEC2/EX	BO210	2
Hydrogen Sulphide	ELECTROCHEMICAL	SE237EH	SE138EH	TS282EH	TS293EH	0 - 100 ppm	ZSEH1	ZSEH1/EX	BO470	2
Nitrogen Oxide	ELECTROCHEMICAL	SE237EN	SE138EN	TS282EN	TS293EN	0 - 300 ppm	ZSEN1	ZSEN1/EX	BO472	2
Nitrogen Dioxide	ELECTROCHEMICAL	SE237EN2	SE138EN2	TS282EN2	TS293EN2	0 - 30 ppm	ZSEN2	ZSEN2/EX	BO018	2
Oxygen**	ELECTROCHEMICAL	SE237EO	SE138E0			0 - 25 % Volume	ZSEO1	ZSEO1/EX	BO015	2
Sulfur Dioxide	ELECTROCHEMICAL	SE237ES	SE138ES	TS282ES	TS293ES	0 - 20 ppm	ZSES1	ZSES1/EX	BO418	2

* Average life in clean air (years)
** Not connectible as 4-20 mA to I/O terminals of SmartLine.

Gas detection

Gas detected	Sensitive element technology	3 relay OUTPUT + fault and 4-20 mA		4-20 mA module		Measuring Range	Replacement cartridge		Calibration canister	Years*
		IP55	ATEX	IP55	ATEX		IP55	ATEX		
Acetylene	PELLISTOR		SE138PE		TS293PE	0 - 100% LIE		ZSP02/EX	BO200	5
Styrene	PELLISTOR		SE138PS		TS293PS	0 - 100% LIE		ZSP03/EX	BO200	5
Hydrocyanic Acid	ELECTROCHEMICAL	SE137EHCN	SE138EHCN	TS282EHCN		0 - 10 ppm	ZSEHCN		B0479	2
Hydrochloric Acid	ELECTROCHEMICAL	SE137EHCL	SE138EHCL	TS282EHCL	TS293EHCL	0 - 30 ppm	ZSEHCL	ZSEHCL/EX	WR000	2
Special GASES (BY REQUEST)	CATALYTIC**	SE137KX	SE138KX			0 - 20% LIE			BO200	5
	PELLISTOR**	SE137PX	SE138PX	TS292PX	TS293PX	0 - 100% LIE	ZSP05	ZSP05/EX	BO200	5
	PELLISTOR***		SE138PX-H		TS293PX-H	0 - 100% LIE			BO200	5
	INFRARED***				TS293IX	0 - 100% LIE				
Carbon Dioxide	INFRARED			TS282IC2	TS293IC2	0 – 5% Vol				
				TS282IC2-H	TS293IC2-H	0 – 5000 ppm				
CO + Petrol Fumes (for parking areas)	CATALYTIC			TS255CB			ZSEC1 - ZSK04		BO200 / BO210	
CO + Nitrogen Dioxide	ELECTROCHEMICAL			TS255CN2			ZSEC1 - ZSEN2		BO008 / BO018	

* Average life in clean air (years)
** Ethyl acetate, Acetone, Iso-Propil Alcool (IPA), Ammonia, Heptane, Hexane, Ethanol (Ethyl alcohol)
*** Acetone, tert-Butyl alcohol, n-Buthyl alcohol (1-Butanol), iso-Buthyl alcohol-2-Methyl-1-Propanol, Iso-Propil Alcool (IPA), Iso-Propyl alcohol (Propan 1-ol), Ammonia, Petrol (unleaded), Butane, trans-Butene-2 (trans-But2ene), But-1-ene, cis-Butene-2 (cis-But2ene), Cyclohexane, Decane, Heptane, Hexane, Ethane, Ethanol (Ethyl alcohol), Ethylene, Hydrogen, iso-Butane, iso-Pentane, Methane, Butanone (MEK), Nitromethane, Nonane, Carbon Monoxide, n-Octane

Accessori

TC011 - Calibration kit for ELITE gas detectors comprising calibration cap and flow meter.

TC014 - Calibration kit for ELITE gas detectors comprising calibration cap and flow meter in stainless steel for highly reactive gas.

BO303 - Flow valve for 34 – 58 – 110ltr canisters Inert gases, Hydrogen Sulphide, Sulfur Dioxide, Ammonia. With flow meter and manometer.

BO305 - HPC valve in stainless steel for 34 – 58 – 110ltr canisters Reactive and highly reactive gases. With manometer.

BO311 - Miniflow valve for 12ltr canisters Inert gases, Hydrogen Sulphide, Sulfur Dioxide, Ammonia Con flow meter and manometer.
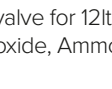
TR530 - Aluminium bracket for wall or ceiling mount of SE137 / SE138 / TS220 / TS293 series detectors.
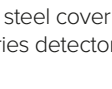
AR015 - Stainless steel cover for TR530 bracket for SE137 / SE138 / TS220 / TS293 series detectors.
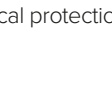
TR533 - Mechanical protection against accident impacts.

Visual/Audible fire signalling devices
Sounders, bells, flashers and signs for analogue-addressable and conventional control panels

One of the roles of primary importance in fire detection systems is covered by audible/visual alarm signalling devices. Sounders, bells and flashers are some of the most common means of providing warning of fire. INIM offers a wide range of these devices to suit all installation needs.

IS2010RE Audible alarm indicator in red casing
IS2010WE Audible indicator in white casing

Audible alarm indicator, operates at 18 to 30 Vdc, IP65 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone from the 14 available and adjustment of the volume.

Tone	14 selectable via EITK2000	IP protection rating	IP65
Consumption	From 10 to 40mA depending on the selected tone	Weight	150 g
Sound output @ 1m	MAX 101 dB	Operating voltage	18 - 30 Vdc
Operating temperature	-20 - + 70 ° C	Dimensions	121x121x57 mm

IS2020RE Visual-audible alarm indicator in red casing
IS2020WE Visual-audible alarm indicator in white casing

Visual-audible alarm indicator, operates at 18 to 30 Vdc, IP65 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone from the 14 available and adjustment of both the volume and flasher intensity.

4,3 mm	14 selectable via EITK2000	Operating temperature	-20 - + 70 ° C
Operating voltage	18 - 30 Vdc	Low power	W-2.8 to 7
Sound output @ 1m	MAX 101 dB	Weight	150 g
Consumption	From 10 to 40mA depending on the selected tone	IP protection rating	IP65
Visual range	EN54-23	Dimensions	121x121x57 mm
High Power	W-3,5-10		

IS2030RE Audible alarm indicator with voice alert in red casing
IS2030WE Audible alarm indicator with voice alert in white casing

Audible alarm indicator with voice function, operates at 18 to 30 Vdc, IP65 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone and voice messages from the 14 tones and 16 voice messages available in 8 different languages on-board the device as well as allowing adjustment of the volume. The EITK2000 also provides for customization of tones and voice messages.

Tone	14 + 16 voice messages selectable via EITK2000	IP protection rating	IP65
Consumption	From 10 to 40mA depending on the selected tone	Weight	150 g
Sound output @ 1m	MAX 101 dB	Operating voltage	18 - 30 Vdc
Operating temperature	-20 - + 70 ° C	Dimension	121x121x57 mm

IS2050RE Visual-audible alarm indicator with voice alert in red casing
IS2050WE Visual-audible alarm indicator with voice alert in white casing

Visual-audible alarm indicator with voice function, operates at 18 to 30 Vdc, IP65 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone and alarm messages from the 14 tones and 16 voice messages available in 8 different languages on-board the device as well as allowing adjustment of the volume and flasher intensity. The EITK2000 also provides for the customization of tones and voice messages.

Tone	14 + 16 voice messages selectable via EITK200014		Operating temperature	-20 - + 70 ° C
Operating voltage	18 - 30 Vdc		Low power	W-2.8 to 7
Sound output @ 1m	MAX 101 dB		Weight	150 g
Consumption	From 10 to 40mA depending on the selected tone		IP protection rating	IP65
Visual range	EN54-23		Dimensions	121x121x57 mm
High Power	W-3,5-10			

IS1010 Audible alarm indicator

Ceiling mount audible-alarm indicator, operates at 18 to 30 Vdc, IP21 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone from the 14 available and adjustment of the volume.

Tone	14 selectable via EITK2000		IP protection rating	IP21
Consumption	From 10 to 40mA depending on the selected tone		Weight	200 g
Sound output @ 1m	MAX 101 dB		Operating voltage	18 - 30 Vdc
Operating temperature	-20 - + 70 ° C		Dimensions	112x112x53 mm

IS1020 Visual-Audible alarm indicator

Ceiling mount visual-audible alarm indicator, operates at 18 to 30 Vdc, IP21 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone from the 14 available and adjustment of the volume and flasher intensity.

Tone	14 selectable via EITK2000		Operating temperature	-20 - + 70 ° C
Operating voltage	18 - 30 Vdc		Low power	C-3-9 O-3.5-9
Sound output @ 1m	MAX 101 dB		Weight	200 g
Consumption	From 10 to 40mA depending on the selected tone		IP protection rating	IP21
Visual range	EN54-23		Dimensions	112x112x53 mm
High Power	C-3-10 O-4-10			

IS1030 Audible alarm indicator with voice alert

Ceiling mount audible-alarm indicator with voice functions, operates at 18 to 30 Vdc, IP21 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone and voice messages from the 14 tones and 16 voice messages available in 8 different languages on-board the device as well as allowing adjustment of the volume. The EITK2000 also provides for the customization of tones and voice messages.

Tone	14 + 16 voice messages selectable via EITK2000		IP protection rating	IP21
Consumption	From 10 to 40mA depending on the selected tone		Weight	200 g
Sound output @ 1m	MAX 101 dB		Operating voltage	18 - 30 Vdc
Operating temperature	-20 - + 70 ° C		Dimensions	112x112x53 mm

IS1050 Visual-Audible alarm indicator with voice alert

Ceiling mount visual-audible alarm indicator with voice function, operates at 18 to 30 Vdc, IP21 protection rated. Use of the EITK2000 manual programmer allows selection of the alarm tone and voice messages from the 14 tones and 16 voice messages available in 8 different languages on-board the device as well as allowing adjustment of volume and flasher intensity. The EITK2000 also provides for the customization of tones and voice messages.

Tone	14 + 16 voice messages selectable via EITK2000		Operating temperature	-20 - + 70 ° C
Operating voltage	18 - 30 Vdc		Low power	C-3-9 O-3.5-9
Sound output @ 1m	MAX 101 dB		Weight	200 g
Consumption	From 10 to 40mA depending on the selected tone		IP protection rating	IP21
Visual range	EN54-23		Dimensions	112x112x53 mm
High Power	C-3-10 O-4-10			

IS0010RE Sounder in red
IS0010WE Sounder in white
IS0010RES Audible signalling device with low-profile base in red plastic

These audible signalling devices operate at 17 to 60 Vdc. Protection rating IP65 (IP 21 for the low-profile base). Complete with mounting base. They provide 32 tones configured by means of a DIP switch. The volume is easily adjusted using the internal trimmer.

Tones	32 tones selectable by means of a DIP Switch		Current consumption	From 4 to 41 mA (depending on the selected tone)
Sound output @ 1 m	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)		Operating temperature	-25°C - +70°C
			Wire Entry	2 x 20mm on base
Protection rating	IP65 (IP 21 for the low-profile base)		Weight	250g
Operating voltage	17 – 60 Vdc		Dimensions	Ø 98 mm h 104 cm (h 80 mm for the low-profile base)

IS0120 Conventional Visual Sounder alarm indicator

Acoustic and visual alarm indicator approved according new EN54-23 standard, IP65 protection rated (deep base version only), Operating voltage from 17 to 60 Vdc, mounting base included. Selectable tone among 32 available by means of DIP SWITCH, flashing frequency selectable at 0,5Hz / 1Hz (by means of DIP SWITCH), 2 selectable sound level.

Operating voltage	From 17 a 60 Vdc
Sound output @ 1m	97 dB(A)
Tones	32 tones selectable by means of a DIP Switch
Power consumption	17 – 60 Vdc
Operating tempearture	-25°C / +70°C
Coverage pattern according to EN54- 23	W-3.1-11.3 C-3-15

ORDER CODES

IS0120RE Red sounder/beacon, deep base, for WALL mounting installation.
IS0120RS Red sounder/beacon, shallow base, for WALL mounting installation.
IS0120REC Red sounder/beacon, deep base, for CEILING mounting installation.
IS0120RSC Red sounder/beacon, shallow base, for CEILING mounting installation.
IS0120WE White sounder/beacon, deep base, for WALL mounting installation.
IS0120WEC White sounder/beacon,deep base, for CEILING mounting installation.

IS0030RE High powered sounder

These audible signalling devices operate at 10 to 60 Vdc. Protection rating IP66. Complete with mounting base. They provide 32 tones configured by means of a DIP switch. The volume is easily adjusted using the internal trimmer.

Tone	64 tones selectable by means of a DIP Switch
Sound output @ 1 m	120 dB(A) configurable
Protection rating	IP66
Operating voltage	10 – 60 Vdc

Current consumption-audible setion	Up to a 550 mA (depending on the selected tone)
Operating temperature	-25°C - +70°C
Weight	1,8Kg
Dimensions	166 x 150 mm

ISC010 6" bell

Motorized bell operates at 19 to 28 Vdc, low current consumption,contains polarization diode.

Sound output @ 1 m	95 dB(A)
Protection rating	IP21
Operating voltage	19 – 28 Vdc
Current consumption	20 mA

Operating temperature	-10°C - +55°C
Weight	920g
Dimensions	160 x 64 mm

ISC010E 6" bell for outdoor use

Motorized bell operates at 19 to 28 Vdc, low current consumption, contains polarization diode.

Sound output @ 1 m	95 dB(A)
Protection rating	IP33C
Operating voltage	19 – 28 Vdc
Current consumption	20 mA

Operating temperature	-10°C - +55°C
Weight	920g
Dimensions	160 x 64 mm

Audible/Visual warning signs

ISS022* Audible/Visual Alarm Sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability and certified EN54-23 visual signal capability.

Comes with "FIRE ALARM" warning. Various warnings available on request.

Sound output @ 1m	92 dB
Light output	EN54-23 W4,6 - 9,1
Operating voltage	from 18Vdc to 30Vdc

Dimensions (LxWxD)	293 x 130 x 75mm
Consumption	50 mA
Flash rate	1 Hz

ISS021* Audible/Visual Alarm Sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability.

Available with different alarm indications: FIRE, EVACUATE, etc.

Sound output @ 1m	Power supply	Cunsumption	Operating temperature	Dimensions
92 dB(A)	from 18Vdc to 30Vdc	21mA	from -10°C to +55°C	292x130x55 mm

PLEXI_ES2000 Signalling sign with hole for sounder installation

Transparent plexiglass panel with "FIRE ALARM" silk screen and Inim Logo. The panel is provided with assembling kit and installation dime. Dimensions 430 x 130 x 4mm.

* Refer to accessory section for available text.

Ivy*
Self-powered outdoor sounder/flasher

The IVY series self-powered sounder/flasher units are a stylish yet highly efficient way of rounding off an intrusion control system. Easy to program, and even easier to install, these units boast unmatched features and performance.
The external heavy duty cover swings down on easy-to-free hinge projections (located on the both sides of the backplate) to provide a very practical tool ledge. A metal inner-shroud protects all the components and reinforces the casing. New-generation Light-Emitting-Diode technology provides super-bright flasher signals and allows extra low power consumption. Alarms can be triggered by power drop or by the activation of the ancillary START input. Ivy sounders are equipped with a test circuit that allows them to spot and report fault conditions instantly to the control panel via a fault output.

- Power input and alarm trigger
- Ancillary trigger input (START)
- Metal inner-shroud
- Super bright LED technology flasher

Technical features	
Power supply (when equipped with step-down switching converter STD241201)	24 V dc
Sound output (@ 24 Vdc - 3m)	MAX 103 dB (A)
IP rating	IP34
Dimensions (HxWxD)	288 x 207 x 107 mm
Weight	2,7 Kg

Smarty*
Indoor siren with flasher

Italian design, Italian technology, Italian style. With Smarty there is no losing out on performance. Italian quality at the best price. The Smarty is fully microprocessor-controlled to ensure excellence in performance. Uses piezoelectric sounder and super bright LED-tecnology flasher.

A direct move towards superior signalling features and low power consumption.

- Piezoelectric sounder
- LED technology flasher

Technical features	
Power supply	24 V dc
Current draw	MAX 50 mA
Sound output (@ 24 Vdc - 1m)	MAX 105 dB (A)
Light Intensity (1m)	25 lux
IP rating	IP 31
Operating temperature	0 / 50 °C
Dimensions (HxWxD)	75 x 112 x 30 mm
Weight	110 g

ORDER CODES

IVY-R	Self-powered sounder/flasher for outdoor use.
Smarty-GFR	Indoor sounder/flasher.

* Not for Eu market.

Audible/Visual signalling devices

Harper lamps

Emergency Lighting

Harper series emergency-lighting and signalling lamps are designed for direct connection to the detection loops of Previdia and SmartLoop control panels.*

The connection of Harper lamps to Previdia and SmartLoop fire detection and signalling control panels permits:

- Turn on/off of the emergency lamps in function of the status of the detection system, in this way it is possible to keep the lamps in Low-light mode or Off mode during normal conditions and activate them at full intensity in the event of an alarm;

- activation and deactivation of the emergency warning lamps in function of detected alarms, thus permitting appropriate signalling of the most effective escape route;
- adjustment of lamp-light intensity during non-emergency conditions (Previdia only);
- compliance with lamp maintenance cycles, the control panel is capable of managing various tests on groups of lamps (functional tests and internal battery life tests) and of storing the respective data; detailed test reports can be generated during these maintenance sessions in compliance with the reference standard (EN50172).

Technology

The light source of the HARPER emergency luminaires series is an optimal blend of new generation long-life LEDs rated to over 50 thousand hours, high light output, low energy consumption and, thanks to an exclusive patented optical lighting design, highly effective glare-free technology that complies with all regulations regarding photobiological safety.
The durability and performance of Harper emergency luminaires is further enhanced by new LiFePO4 long-life batteries which are smaller and more environment-friendly than standard nickel-cadmium or nickel-metal hydride batteries.

Our selection

The Harper series offers a vast selection of LED lights for all emergency lighting needs. The various levels of autonomy, different protection grades which satisfy the requirements of all environments and accessory-device flexibility determine suitability for all applications.
Two operating modes are available: Maintained The luminaire remains On continuously both when the mains power supply is present and when it is not. This is normally required for evacuation routes. Non Maintained The luminaire switches on only when there is a power cut on the mains power line.

* All Harper's luminaires, in Bus Supervised version, use the loop wiring only for communication; All luminaires need also the mains supply 230Vac.

Code guide

Product name		
	DV	DIVA
	DX	DEXIA
	HP100	Harper 100
	HP200	Harper 200
	HP320	Harper 320
	HP330	Harper 330
	SP	SPOTLED
Version*	S	Standard
	A	Self-test
	B	Bus Supervised
	L	Central-battery
Maintained (M) – Non maintained (NM)*	E	Non-Maintained
	A	Maintained
Power	08	W
	11	W
	18	W
	24	W
	36	W
Duration	01	1 hour
	15	1,5 ore
	02	2 hours
	03	3 hours
	04	4 hours
	05	5 hours
	06	6 hours
	07	7 hours
IP Grade	40	IP40
	42	IP42
	65	IP65

Product code example: HP100 B A 24 01 40

N.B.
*The only versions that can be connected to the control panel Loop are the "B: BUS Supervision" versions.
** The only versions that can be switched on by the control panel, nalso during NON-emergency conditions (mains present) are the Permanent (BA) versions.

Diva
Luminaires

Compact, minimalist design LED emergency lamp.

Product Type	Lighting fixture
Versions	Standard, Self-Test, Bus Supervised, Central-Battery
Functioning type	Maintained, non mantained
Installation	Wall, Ceiling
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO4 3,2V
Insulation class	II
Color	Bianco RAL9003
Light source	LED
Temperature colour	6000K
Screen	Ultrasound-welded polycarbonate
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP grade	IP42, IP65 (*)
IK grade	IK07
Operating temperature	From 0° to 40°C
Complies to standards	EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471
Dimensions	230x100x22,5 mm

(*) The IP65 rating is obtained with an accessory kit that includes:
1) gasket;
2) junction-box fitting;
3) plastic caps.

ORDER CODES

p/n	Power	Duration	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	MED. FL. (lm) N/M	MED. FL. (lm) M	Recharge
DVBA080342	8W	3h	1,5	N/M-M	130	130	6h
DVBA110242	11W	2h	1,5	N/M-M	180	180	6h
DVBA110342	11W	3h	2 x 1,5	N/M-M	180	180	12h
DVBA180142	18W	1h	1,5	N/M-M	320	180	6h
DVBA180242	18W	2h	2 x 1,5	N/M-M	320	180	12h
DVBA241542	24W	1,5h	2 x 1,5	N/M-M	400	220	12h

Accessories

OHDVIP65
IP65 Kit

INICOM
Remote control for management
of rest mode

OHDVPTK
Pictograms kit for DIVA

OHX00BR45
Bracket for installation with a 45° inclination

OHX00GRT
Metal protective grating for complete
protection of the luminaire body
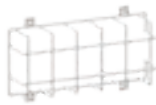
OHBBK
Kit for fixing on electrified bar

Dexia
Luminaires

Emergency Lamp with high flux LED especially designed for industrial environments,
department stores and parking lots.

Product Type	Apparecchio di Emergency Luminaires
Versions	Standard, Self-Test, Bus Supervised, Central-Battery
Functioning type	Maintained, non mantained
Installation	Wall, ceiling, recessed wall/false ceiling mount
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO4 3,2V
Insulation class	II
Color	Bianco RAL9003
Light source	LED
Temperature colour	6000K
Screen	Ultrasound-welded polycarbonate
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP grade	IP42, IP65 (1)
IK grade	IK07
Operating temperature	From 0° to 40°C
Complies to standards	EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471
Dimensions	322x140x50 mm
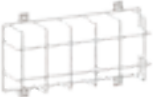
(*) The IP65 rating is obtained with an accessory kit that includes:
1) gasket;
2) junction-box fitting;
3) plastic caps.

Emergency Luminaires

HARPER
EMERGENCY LIGHTING

ORDER CODES

p/n	Power	Duration	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	MED. FL. (lm) N/M	MED. FL. (lm) M	Recharge
DXBA360142	36W	1h-1,5h-2h-3h	2 x 3,3	N/M-M	1300-1000-840-640	1000	12h
DXBA240142	24W	1h-1,5h-2h-3h	3,3	N/M-M	700-550-450-350	550	12h

Accessories

OHDXIP65
IP65 Kit

OHX00BR45
Bracket for installation with a 45° inclination

OHDXPTK
Pictograms kit for DEXIA

OHX00GRT
Metal protective grating for complete protection of the luminaire body

OH200BRI
Eall box for flush mounting

INICOM
Remote control for management of rest mode

OHX00FCK
Plasterboard and false ceiling fastening kit

OHBBK
Kit for fixing to electrified bar

EK 03

HP100
Emergency luminaires

Neat, compact easy to install emergency luminaires. The use of new generation LED technology with exclusive patented optics guarantees high flux and reliability over time.

GARANZIA 5 ANNI

Product Type	Emergency lamp
Versions	Standard, Self-Test, Bus-Supervised, Central-battery
Functioning type	Maintained, Non-Maintained
Installation	Wall, ceiling, flush mounting/false ceiling
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO$_4$ 3,2V
Insulation class	II
Color	RAL9003 white
Light source	LED
Temperature colour	6000K
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode
	Test button
IP grade	IP40, IP65
IK grade	IK07
Operating temperature	From 0° to 50°C
Complies to standards	EN 55015, EN 60598-1, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471
Dimensions	255x122x38 mm

ORDER CODES

p/n	Power	Duration	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	MED. FL. (lm) N/M	MED. FL. (lm) M	IP Grade	Recharge
HP100 B E 11 01 40	11W	1h-1,5h	1,5	N/M	130-95	-	IP40	6h
HP100 B E 24 01 40	24W	1h	1,5	N/M	250	-	IP40	6h
HP100 B E 11 03 40	11W	3h-4h	3,3	N/M	130-95	-	IP40	12h
HP100 B E 24 03 40	24W	3h	3,3	N/M	250	-	IP40	12h
HP100 B A 11 01 40	11W	1h-1,5h	1,5	N/M-M	130-95	60	IP40	6h
HP100 B A 24 01 40	24W	1h	1,5	N/M-M	250	120	IP40	6h
HP100 B A 11 03 40	11W	3h-4h	3,3	N/M-M	130-95	60	IP40	12h
HP100 B A 24 03 40	24W	3h	3,3	N/M-M	250	120	IP40	12h
HP100 B E 11 01 65	11W	1h-1,5h	1,5	N/M	130-95	-	IP65	6h
HP100 B E 24 01 65	24W	1h	1,5	N/M	250	-	IP65	6h
HP100 B E 11 03 65	11W	3h-4h	3,3	N/M	130-95	-	IP65	12h
HP100 B E 24 03 65	24W	3h	3,3	N/M	250	-	IP65	12h
HP100 B A 11 01 65	11W	1h-1,5h	1,5	N/M-M	130-95	60	IP65	6h
HP100 B A 24 01 65	24W	1h	1,5	N/M-M	250	120	IP65	6h
HP100 B A 11 03 65	11W	3h-4h	3,3	N/M-M	130-95	60	IP65	12h
HP100 B A 24 03 65	24W	3h	3,3	N/M-M	250	120	IP65	12h

HP200
Emergency Luminaires.

Neat, compact easy to install emergency luminaires. The use of new generation LED technology with exclusive patented optics guarantees high flux and reliability over time.

Product Type	Emergency lamp
Versions	Standard, Self-Test, Bus-Supervised, Central-battery
Functioning type	Maintained, Non-Maintained
Installation	Wall, ceiling, flush mounting/false ceiling
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO$_4$ 3,2V
Insulation class	II
Color	Bianco RAL9003
Light source	LED
Temperature colour	6000K
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode
	Test button
IP grade	IP42, IP65
IK grade	IK07
Operating temperature	from 0° to 50°C
Complies to standards	EN 55015, EN 60598-1, EN 60598-2-22, EN 60598-2-2, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471
Dimensions	319x137x38 mm

Accessories

OH100BRI
Eall box for flush mounting

OH100PTDW
Pictogram for HP100 indicating down

OH100PTRG
Pictogram for HP100 indicating right

OH100PTLF
Pictogram for HP100 indicating left

OHBBK
Kit for fixing to electrified bar

OHX00FCK
Plasterboard and false ceiling fastening kit

OHX00BR45
Bracket for installation with a 45° inclination

OHX00GRT
Metal protective grating for complete protection of the luminaire body

INICOM
Remote control for management of rest mode

ORDER CODES

p/n	Power	Duration	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	MED. FL. (lm) N/M	MED. FL. (lm) M	IP Grade	Recharge
HP200 B E 18 01 42	18W	1h-1,5h	1,5	N/M	180-135	-	IP42	6h
HP200 B E 36 01 42	36W	1h-1,5h	3,3	N/M	360-270	-	IP42	12h
HP200 B E 18 03 42	18W	3h-4h	3,3	N/M	180-135	-	IP42	12h
HP200 B E 36 03 42	36W	3h-4h	2 x 3,3	N/M	360-270	-	IP42	24h
HP200 B A 18 01 42	18W	1h-1,5h	1,5	N/M-M	180-135	80	IP42	6h
HP200 B A 36 01 42	36W	1h-1,5h	3,3	N/M-M	360-270	170	IP42	12h
HP200 B A 18 03 42	18W	3h-4h	3,3	N/M-M	180-135	80	IP42	12h
HP200 B A 36 03 42	36W	3h-4h	2 x 3,3	N/M-M	360-270	170	IP42	24h
HP200 B E 18 01 65	18W	1h-1,5h	1,5	N/M	180-135	-	IP65	6h
HP200 B E 36 01 65	36W	1h-1,5h	3,3	N/M	360-270	-	IP65	12h
HP200 B E 18 03 65	18W	3h-4h	3,3	N/M	180-135	-	IP65	12h
HP200 B E 36 03 65	36W	3h-4h	2 x 3,3	N/M	360-270	-	IP65	24h
HP200 B A 18 01 65	18W	1h-1,5h	1,5	N/M-M	180-135	80	IP65	6h
HP200 B A 36 01 65	36W	1h-1,5h	3,3	N/M-M	360-270	170	IP65	12h
HP200 B A 18 03 65	18W	3h-4h	3,3	N/M-M	180-135	80	IP65	12h
HP200 B A 36 03 65	36W	3h-4h	2x3,3	N/M-M	360-270	170	IP65	24h

SPOTLED
Emergency spotlight

Recess mounting emergency spotlight with ultra-slimline design and high performance illumination. Equipped as standard with a symmetrical and asymmetrical lens.

Product Type	Emergency lamp
Versions	Standard, Self-Test, Bus-Supervised, Central-battery
Functioning type	Maintained, Non-Maintained
Installation	False ceiling mount
Power supply	220/230Vac, 50/60 Hz
Battery	LiFePO4 3,2V
Insulation class	II
Color	Bianco RAL9003
Light source	LED
Temperature colour	5700K
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode
IP grade	IP40
IK grade	IK07
Operating temperature	from 0° to 40°C
Complies to standards	EN 55015, EN 60598-1, EN 60598-2-2, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61547, EN 62471
Diameter	90

ORDER CODES

p/n	Power	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	Maintained Non-Mantained	MED. FL. (lm) M	Recharge
SPBA240140	1h	1,5	N/M-M	300	220	6h
SPBA240340	3h	2 x 1,5	N/M-M	300	220	12h

Accessories

INICOM
Remote control for management of rest mode

Accessories

OH200BRI
Eall box for flush mounting

OH200PTDW
Pictogram for HP200 indicating down

OH200PTRG
Pictogram for HP200 indicating right

OH200PTLF
Pictogram for HP200 indicating left

OHBBK
Kit for fixing to electrified bar

OHX00FCK
Plasterboard and false ceiling fastening kit

OHX00BR45
Bracket for installation with a 45° inclination

OHX00GRT
Metal protective grating for complete protection of the luminaire body

INICOM
Remote control for management of rest mode

HARPER
EMERGENCY LIGHTING

03

HP320
Signalling

GARANZIA 5 ANNI

Signalling luminaires for escape routes, compact and flexible, single bracket suits all mounting applications. Visibility distance 20 meters with international standard compliant safety signs (ISO7010).

Product Type	Signalling luminaires
Versions	Self-Test, Bus-Supervised, Central-Battery
Functioning type	Maintained
Installation	Surface, flag, ceiling, false ceiling, suspended mounting
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO4 3,2V
Visibility distance	20 m
Insulation class	II
Color	RAL9003 white
Light source	LED
Color temperature	6000K
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode
	Test button and brightness dimmer
IP grade	IP40
IK grade	IK07
Operating temperature	From 0° to 50°C
Complies to standards	EN 60598-1, EN 60598-2-22, EN 62471, EN 1838, ISO 3864-4, ISO 7010
Dimensions	217x176,5x41 mm

Accessories

OH320FCK
Kit for recessed installation
on a false ceiling leaving only
the signalling panel visible

OH320PNDW
Pmma panel with pictograms
indicating down

OH3X0SPK
Kit for suspension installation

OH320PNRL
Pmma panel with pictograms
indicating left/right*

OH3X0GRT
Metal protective grating for complete
protection of the luminaire body

INICOM
Remote control for management
of rest mode

ORDER CODES

p/n	Power	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	Maintained Non-Mantained	Recharge
HP320 B A 00 03 40	3 h	1,5	M	IP40	6h

HARPER
EMERGENCY LIGHTING

HP330
Signalling

Signalling luminaires for escape routes, compact and flexible, single bracket suits all mounting applications. Visibility distance 30 meters with international standard compliant safety signs (ISO7010).

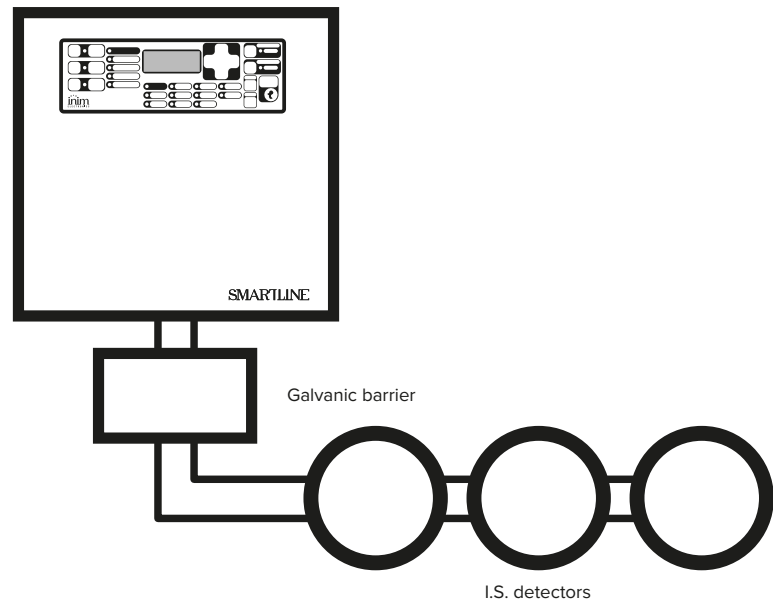| Product Type	Signalling luminaires
Versions	Self-Test, Bus-Supervised, Central-Battery
Functioning type	Maintained
Installation	Surface, flag, ceiling, false ceiling, suspended mounting
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO4 3,2V
Visibility distance	30 m
Insulation class	II
Color	RAL9003 white
Sorgente Luminosa	Led
Color temperature	6000K
Additional info	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode
	Test button and brightness dimmer
IP grade	IP40
IK grade	IK07
Operating temperature	From 0° to 50°C
Complies to standards	EN 60598-1, EN 60598-2-22, EN 62471
	EN 1838, ISO 3864-4, ISO 7010
Dimensions	322x231,5x41 mm

ORDER CODES

p/n	Power	Battery LiFePO$_4$ 3,2V [Ah]	Maintained Non-Mantained	IP grade	Recharge
HP330 B A 00 01 40	1 h	1,5	M	IP40	6h
HP330 B A 00 03 40	3 h	3,3	M	IP40	12h

Accessories

OH330FCK
Kit for recessed installation
on a false ceiling leaving only
the signalling panel visible

OH330PNDW
Pmma panel with pictograms
indicating down

OH3X0SPK
Kit for suspension installation

OH330PNRL
Pmma panel with pictograms
indicating left/right*

OH3X0GRT
Metal protective grating for complete
protection of the luminaire body

INICOM
Remote control for management
of rest mode

Emergency Luminaires

Conventional detectors and accessory items Atex Certified

Galvanic barrier

I.S. detectors

Addressable detectors and Apollo XP95 accessory items Atex Certified

SmartLoop

Traslatore di controllo

Barriera Galvanica

Rilevatori I.S.

ORBIS IS (Intrinsecally Safe) is a range of conventional detectors which have been especially designed and approved for use in inflammable atmospheres. These products are certified BASEEFA (British Approval Service for Electrical Equipment in Flammable Atmospheres) in compliance with BSEN60079-0:2004,

IEC60079-0:2004, EN5002:2002, EN/BSEN/IEC60079-26:2004 Category II 1G Ex ia IIC T5 (T4 to Ta < 60°C). The principles diagram (on the right) illustrates the wiring method required for IS addressable detectors and the accessories to utilize.

XP95 IS (Intrinsecally Safe) is a range of detectors which have been especially designed and certified for use in inflammable atmospheres. These products are certified BASEEFA (British Approval Service for Electrical Equipment in Flammable

Atmospheres) in compliance with EN50014 and EN50020 and approved E Ex ia IIC T5 (T4 to Ta < 60°C). The principles diagram (on the right) illustrates the wiring method required for IS addressable detectors and the accessories to utilize.

ORB-OP-52027 - IS Conventional optical smoke detector, category II 1G Ex ia IIC T5 (T4 to Ta<60°C).
LPCB Cert. No. 010s

ORB-OH-53027 - IS Conventional optical smoke/heat detector, category II 1G Ex ia IIC T5 (T4 to Ta<60°C).

ORB-HT-51145 - IS AIR Conventional heat detector (Rate-of-rise) category II 1G Ex ia IIC T5 (T4 to Ta < 60°C).
LPCB Cert. No. 010r

ORB-HT-51151 - IS Conventional heat detector BS (Fixed threshold) category II 1G Ex ia IIC T5 (T4 to Ta < 60°C).
LPCB Cert. No. 010r

ORB-MB-50018 - Mounting base for Orbis Intrinsically Safe conventional detectors
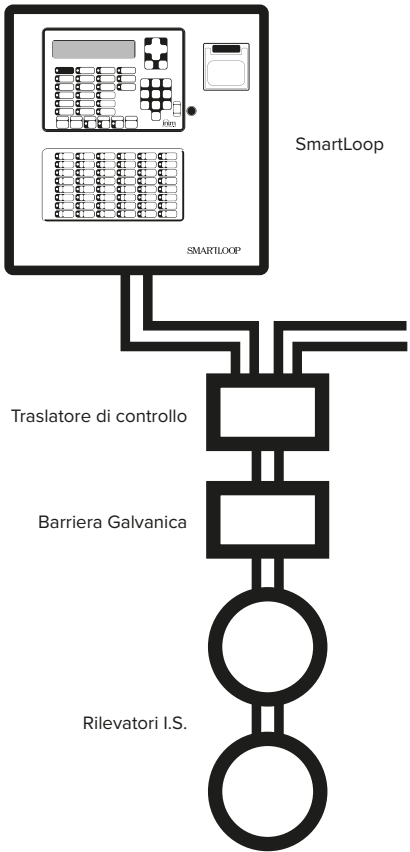
55100-031 - Intrinsecally Safe Orbis call point for indoor application.

55100-033 - Intrinsecally Safe Orbis call point for outdoor application.

29600-378 - Galvanic barrier for conventional detectors – DIN rail moun

55000-640 - IS Addressable optical smoke detector - Approved E Ex ia IIC T5 (T4 to Ta < 60°C).
LPCB Cert. No. 010q

55000-440 - IS Addressable heat detector - Approved E Ex ia IIC T5 (T4 to Ta < 60°C).
LPCB Cert. No. 010p

45681-215 - IS Mounting base for addressable detectors.

55200-940 - IS Addressable callpoint - Approved E Ex ia IIC T5 (T4 to Ta < 60°C)

55000-855 - Single channel protocol translator - DIN rail mount. LPCB Cert. No. 010ag

55000-856 - Dual channel protocol translator - DIN rail mount. LPCB Cert. No. 010ag

29600-098 - Galvanic barrier for analogue detectors - DIN rail mount

ATEX equipment and fire-extinguishing accessory devices

ATEX sounders

17-970328 - IS sounder is an audible signalling device for installation in explosive atmospheres.
- Category 1 (per zone, type 0, 1 and 2) - Approval ATEX - Ex II EEx ia IIC T4

Tones	49 selectable by means of a DIP Switch
Sound output @ 1m	Up to 100 dB(A) (configurable)
Protection rating	IP65
Operating voltage	6 – 28 Vdc
Current consumption	25 mA
Operating temperature	-40°C - +60°C
Wire Entry	2 x 20mm on base
Weight	350g
Dimensions	88.7 (diameter) x 100 (height) mm

17-970330 - IS Sounderflasher suitable for installation in explosive atmospheres.
- Category 1 (for zones type 0,1 and 2) - Approval ATEX - Ex II EEx ia IIC T4

Tones	49 tones selectable by means of a DIP Switch
Sound output @ 1 m	Up to @ 100 dB(A) (configurable)
Protection rating	IP65
Operating voltage	6 – 28 Vdc
Current consumption	48 mA
Operating temperature	-40°C - +60°C
Wire Entry	2 x 20mm on base
Weight	350g
Dimensions	88.7 (diameter) x 85 (height) mm

17-970362 - Zener Barrier for IS Sounders Mounted on DIN rail, capable of powering 2 sounders.

17-970271 - High-powered sounder in flameproof enclosure suitable for installation in explosive atmospheres.
- Category 2 (for zones type 1 and 2) - Approval ATEX - Ex II 2G EEx IIC T4

Tones	32 selectable by means of a DIP Switch
Sound output @1 m	117 dB(A) (configurable)
Protection rating	IP67
Operating voltage	24 Vdc
Current consumption	265 mA
Operating temperature	-50°C - +55°C
Weight	3,4Kg
Dimensions	181 (diameter) x 262 (height) mm

TCB-0003 - Flasher in flameproof enclosure suitable for installation in explosive atmospheres.
- Category 2 (for zones type1 and 2) - Approval ATEX - Ex II 2G EEx IIC T4.

Light output	5 J
Protection rating	IP67
Operating voltage	24 Vdc
Current consumption	300 mA
Operating temperature	-50°C - +40°C
Weight	2,45Kg
Dimensions	153 (diameter) x 246 (height) mm

17-970234 - Bell in flameproof enclosure for audible signalling in esplosive atmosphere
- Category 2 (for zones type 1 and 2) - Approval ATEX - Ex II 2G EExd and IIC T6

Sound output @ 1 m	105 dB(A)
Protection rating	IP66
Operating voltage	24 Vdc
Current consumption	320 mA
Operating temperature	-20°C - +40°C
Weight	3,5 Kg
Dimensions	200 (diameter) x 270 (Alluminium mounting base) mm

ATEX EQUIPMENT AND FIRE-EXTINGUISHING ACCESSORY DEVICES

Atex beam detectors

ARDEA Eex S-SF - Atex Smoke Beam detector
- Barrier TX - RX - Cat. 2GD-EXD IICT6 - From 5 to 100m

Accessory items

29600-131

Alluminium deckhead mounting box with access ports threaded to fit PG16 glands. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

29600-139

Alluminium deckhead mounting box with access ports threaded to fit M20 components. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

29600-196

Plastic deckhead mounting box with access ports threaded to fit PG16 glands. Allows the detector base to be fitted in such a way that the rear of the detector is sealed. Gives extra protection to devices fitted in areas where there is risk of moisture ingressing through the rear.

Accessory items for fire extinction systems

SmartLetLoose/ONE

Addition of a SmartLetLoose/ONE fire suppression board to any SmartLine or SmartLight series fire control panel provides the system with GAS suppression control capabilities in compliancy with EN12094-1. SmartLetLoose/ONE enhanced control panels provide all the functions required by the applicable normative and are capable of managing all devices required for fire extinction system management.

Callpoints in varios colours

IC0020Y - Conventional Callpoint in yellow enclosure
IC0020G - Conventional Callpoint in green enclosure
IC0020B - Conventional Callpoint in blue enclosure
IC0020W - Conventional Callpoint in white enclosure
MCP3A-Y000SG-K013-65C* - Indoor Call Point yellow with hinged cover. Manual Release.
MCP3A-B000SG-K013-66C* - Indoor Call Point blue with hinged cover. Emergency Stop.

Callpoint non-latching, automatic reset on release, supplied without label.

ICB010Y - Callpoint in yellow enclosure
ICB010G - Callpoint in green enclosure
ICB010B - Callpoint in blue enclosure
ICB010W - Callpoint in white enclosure

Keyswitch

ICK010Y - Keyswitch in yellow enclosure
ICK010G - Keyswitch in green enclosure
ICK010B - Keyswitch in blue enclosure
ICK010W - Keyswitch in white enclosure

ISS022** - Conventional Audible/Visual Warning Sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability and certified EN54-23 .

Sound output @ 1m	92 dB	Dimensions (LxWxD)	293 x 130 x 75 mm
Light output	EN54-23 W 4,6 - 9,1	Consumption	50 mA
Operating voltage	11 – 30 Vdc	Flash rate	1 Hz

ISS021** - Audible/Visual Warning Sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability.
Available with different alarm indications: FIRE, EVACUATE, etc.

Sound output @ 1m	Operating voltage	Consumption	Operating temperature	Dimensions
92 dB(A)	from 18Vdc tov 30Vdc	21mA (media)	da -10°C a +55°C	292x130x55mm

* EN12094-3 approved.
** Refer to accessory section for available text.

SmartLevel

24V power supply station

SmartLevel series power stations are ideal for supplying power to all the devices located in the area protected by the detection system. They are completely supervised and fully approved to meet EN54 requirements. They have a new switching module with resonant technology and an internal CPU for reliable, efficient and secure power management.

Available in 2 versions:
SPS24060G and SPS24160G (respectively 1.5A and 4A) with LCD command screen for viewing the events log or fault details (low battery, mains failure, dispersion to earth, etc.) and the current draw of each output; provides 3 individually protected outputs with 4A current limit, connectible to the RS485 BUS of the fire detection panel.

SPS24060S and SPS24160S (respectively 1.5A and 4A) with status LEDs, fault output, mains fault output, single power output. Can be used as a stand-alone device or connected directly to the loop of an addressable control panel (Inim protocol). Thanks to its loop interface, it is recognized by the control panel as being a power station and therefore becomes completely and automatically

supervised thus reporting all signals to the control panel.

The SPS24060x versions are capable of supplying up to 1.5A @ 27.6V and provide housing for two 12V –7Ah batteries; the SPS24160x versions are capable of supplying up to 4A @ 27.V and provide housing for two 12V –17Ah batteries.
The power stations have an independent battery-charging circuit capable of charging the batteries without affecting the output current to the load, and a thermal probe that adapts the battery charge in accordance with their operating temperature. The battery efficiency is assessed by accurately measuring the internal resistance (with 0.1 ohm resolution) of the batteries in such a way as to signal any decrease in efficiency that might jeopardize the system functionality in the event of mains failure.

The CPU contained in the innovative Switching module is the core of the apparatus and is capable of supervising all of its parameters (internal temperature, current supplied, output voltage, battery parameters, dispersion to earth) and guarantees a product of the highest quality.

Main features

- Input Voltage: 230Vac +10% -15% 50/60 Hz
- Stability: above 1%
- 3 outputs, each protected against short circuit and with a 4A current limit. (SPS24060G and SPS24160G version only)
- Graphic LCD, Buzzer, Current draw monitoring on each output, Events log for the last 50 events. (SPS24060G and SPS24160G version only)
- Directly connectible to the detection loop of the control panel (SPS24060S and SPS24160S versions only)
- Capable of connection to the RS485 BUS of the control panel for the supervision of the power supply station and control of the outputs (SPS24060G and SPS24160G versions only)
- Independent built-in battery charger with thermal probe for battery temperature measurement
- Battery supervision
- Deep discharge protection (disconnects batteries)
- Fault signal relay output
- Detection of dispersion-to-earth fault
- Certified CPD EN54-4

SPS24060G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg

SPS24160G

- LCD
- Connects to RS485 BUS
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497 x 380 x 87 mm
- Weight (without batteries): 6 kg

SPS24060S

- Connects to the detection loop
- Internal switching power-supply module 1.5A @ 27.6V
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325 x 325 x 80 mm.
- Weight (without batteries): 3 kg

SPS24160S

- Connects to the detection loop
- Internal switching power-supply module 4A @ 27.6V
- Housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497 x 380 x 87 mm.
- Weight (without batteries): 6 kg

Power supply modules and boxed power supplies

INIM offers two switching power supply/battery charger units: the 1.5A model and the 4A model. "In box" versions of both models are available. The "in box" version consists of a switching power supply module inside a metal enclosure that also provides housing for two 12V batteries.

This solution is ideal for applications where supervision of all the power supply components is not essential. All models provide a thermal probe input. This device protects the batteries against overheating and successive damage by measuring the battery temperature and regulating the battery-charge voltage accordingly. The switching module is based on a CPU that manages its own parameters (temperature, current, voltage), the battery charging operation (by means of an independent circuit) and supervises the batteries (voltage, internal resistance, etc.) and other parameters of the system (output current and voltage, dispersion to earth, etc.).

| IPS24060G | BPS24060G | IPS24160G | BPS24160G |

IPS24060G - Power supply module @ 1.5A
BPS24060G - In box power supply module @ 1.5A

- CPU based power supply
- Input Voltage: 230Vac ± 15%, 50Hz
- Mains absorption: 0.4A
- Output Voltage: 27.6Vdc
- Maximum Current: 1.5Adc
- Stability: above 1%
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery charge adjustment in accordance with the battery temperature (ProbeTH

thermal probe management).
- Metal enclosure
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

BPS24060G model:
- Housing for two 7Ah, 12V batteries
- Dimensions (LxWxD): 325x325x80mm
- Weight (without batteries): 3Kg

IPS24160G - Power supply module @ 4A
BPS24160G - In box power supply module @ 4A

- CPU based power supply
- Input Voltage: 230Vac ± 15%, 50Hz
- Mains absorption: 0.9A
- Output Voltage: 27.6Vdc
- Maximum: 4Adc
- Stability: above 1%
- Overload protection
- Short-circuit protection
- Independent built-in battery charger with battery-charge adjustment in accordance with the battery temperature (ProbeTH

thermal probe management)
- Metal enclosure
- Deep discharge protection (disconnects batteries)
- Detection of dispersion-to-earth fault
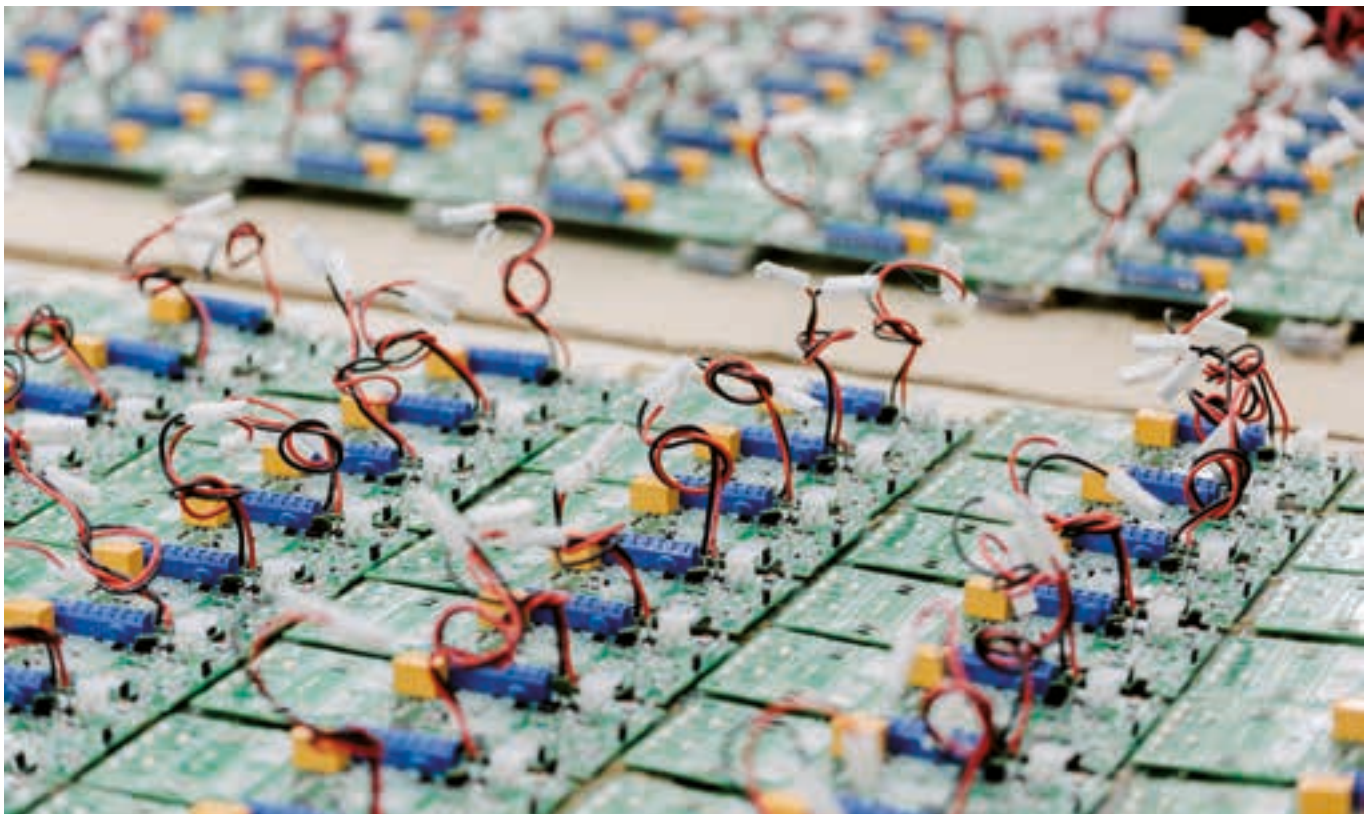- Internal temperature management of switching module

BPS24140 model features:
- Housing for two 17Ah, 12V batteries
- Dimensions (LxWxD): 497x380x87mm
- Weight (without batteries): 6Kg

ProbeTH

Attachment of the thermal probe (optional) to the control panel/power supply station allows the battery-charge voltage to be regulated in accordance with the battery temperature, this optimizes the charge voltage and results in longer battery life.

ORDER CODES

SPS24060G	24V, 1.5A power supply station with LCD and RS485 connection capability
SPS24160G	4V, 4A power supply station with LCD and RS485 connection capability
SPS24060S	4V, 1.5A power supply station with LED status indicators and Inim Loop connection capability
SPS24160S	4V, 4A power supply module with LED status indicators and Inim Loop connection capability
IPS24060G	1.5A power supply module
IPS24160G	A power supply module
BPS24060G	In box 1.5A power supply module
BPS24160G	In box 4A power supply module
ProbeTH	Thermal probe

Hold open electromagnets

Besides signalling the outbreak of fire, one of the main functions of automatic fire-detection systems is to restrict the fire by releasing fire doors normally held open by electromagnetic holders.

The following section describes an array of hold and release devices suitable for the majority of fire doors.

01630I

Hold open electromagnets for fire doors. Base and fixed counterplate in zinc plated steel.

Operating voltage	24 Vdc
Current consumption	65 mA
Holding force	>55Kg
Base dimensions	65 x 65 x 3mm
Electromagnet diameter	50mm x 39mm

01830I

Hold open electromagnets for fire doors. Base and fixed counterplate in zinc plated steel.

Operating voltage	24 Vdc		Base dimensions	65 x 65 x 3mm
Current consumption	70 mA		Electromagnet diameter	70mm x 39mm
Holding force	>140Kg			

19001

Hold open eletromagnets for fire doors with door release button. Enclosure in black ABS. Supplied without counterplate (to be purchased separately).

19002

Hold open eletromagnets for fire doors with door release button. Enclosure in black anodized aluminium. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc		Holding force	>55Kg
Current consumption	60 mA		Base dimensions	90 x 75 x 35mm

18005

Hold open eletromagnets for fire doors with door release button. Fixed floor mount. Body in black or white painted aluminium [DR 18005B]. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc		Holding force	>55Kg
Current consumption	60 mA		Base dimensions	90 x 75 x 35mm

01805Z

Swivel counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005 magnets. Complessive Dimensions 65 x 65 x 54mm.

01800Z

Fixed counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005 magnets. Complessive Dimensions 65 x 65 x 28mm.

18101

Hold open eletromagnets for fire doors with door release button. Body in black painted steel. Supplied without counterplate (to be purchased separately).

Operating voltage	24 Vdc		Holding force	>140Kg
Current consumption	70 mA		Base dimensions	100 x 90 x 43mm

01815Z

Swivel counterplate with base in zinc plated steel for DR18101 magnets. Complessive Dimensions 65 x65 x 54mm.

01810Z

Fixed counterplate with base in zinc plated steel for DR18101 magnets. Complessive Dimensions 65 x65 x 33mm.

01740

Mounting telescopic bracket for wall or floor mounting. Body in black painted steel. 180° swing door-retainer fixing plate. Length 140mm (adjustable up to 200mm).

Ancillary devices

The section describes useful ancillary devices for fire detection systems such as: protective enclosures, conduit-to-base adapters, test magnets, etc. Also included are interface boards and stand-alone detectors for residential applications.

Interface boards

EB0010 - Standardized interface board

Connects directly to the RS485 BUS of INIM control panels. The system processes the interface data in the same way as repeater data. This interface provides an input/output connector which receives/transmits signals to/from standardized Fire Department control boxes.

EB0020 - Relay board

Converts supervised or open-collector outputs into a dry contacts. Operates at 12 or 24 V (selected by means of a jumper). Provides 4 mounting locations, board dimensions 45x35 mm.

STD241201 - 24Vdc/12Vdc step-down switching converter

Converts voltage from 24V down to 14V, suitable for feeding 12V devices (outdoor sounderflashers, diallers, etc.) directly from fire the control panel. Based on switching technology, this highly efficient device produces low heat output.

Accessories items for detectors

EB0010 - Detector base

Detector base accommodates IRIS and ENEA series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.

EB0020 - Relay base

Relay base with a single relay which activates when the detector senses an alarm. The relay base allows you to interface the detector with intrusion control panels in domestic applications.

EB0030 - Base profonda

Converts voltage from 24V down to 14V, suitable for feeding 12V devices (outdoor sounderflashers, diallers, etc.) directly from fire the control panel. Based on switching technology, this highly efficient device produces low heat output.

EB0040

Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases, h 34 mm.

EB0040H

2W heater for EB0040 bases.

EB0050

Spacer for EB0010 Mounting base, create a 10mm GAP under detector's base for cable entry.

EB0060*

Mounted base with integrate buzzer driven by "R" output.

DD001

This is a cover for unused detectors: it attaches to Inim detector bases, restores line continuity and provides a discrete aesthetic semblance. Ideal for those applications where bases are installed for the future addition of detectors.

* Not for Eu market.

Accessory items

IL0010

Remote indicator. LED repeater replicates the alarm signal of a detector in alarm status.

S/KARI MR

Remote indicator for ceiling or floor installation. 3Vdc, 24V power supply, Polycarbonate material, Labelles as "FIRE" in red colour, IP42 rated.

IACPP10

Transparent weatherproof cover for manual callpoints, suitable for outdoor applications. The unit fits neatly over the callpoint and is sealed by gaskets which prevent dust, grime and water from coming into contact with the device. Access to the device is gained by simply lifting the cover.

IACPP20

Transparent weatherproof cover for manual callpoints, suitable for outdoor applications. The unit fits neatly over the callpoint and is sealed by gaskets which prevent dust, grime and water from coming into contact with the device. Access to the device is gained by simply lifting the cover. A battery-powered beeper activates automatically when the cover is lifted, in order to dissuade malicious alarms.

INDOCBOX

Metal document box with key for the safe keeping of fire-system documents and layout plans.

INLINEFMF

Flush mounting kit for SmartLine and SmartLine panels range. It consists of two L shaped bracket and a front panel metal made.

INPROTCP

Metal protection frame for manual call points.

CTS01

Aluminum sign board indicating fire manual call point presence, 160x160 mm.

CTS02

Aluminum sign board indicating fire alarm sounder presence, 160x160 mm.

Text label for audible/visual signalling devices (ESS021 - ESS022 - ISS021 - ISS022)

FOP45 ""FIRE ALARM" (box con 10 pz.)
FOP46 "DOOR ALARM" (box con 10 pz.)
FOP47 "SPEGNIMENTO IN CORSO" (box con 10 pz.)
FOP48 "EVACUARE IL LOCALE" (box con 10 pz.)
FOP49 "ALLARME GAS" (box con 10 pz.)
FOP36 "FIRE DO NOT ENTER" (box con 10 pz.)

FOP37 "EXTINCION DISPARADA" (box con 10 pz.)
FOP38 "GAS DISCHARGE" (box con 10 pz.)
FOP39 "FUEGO" (box con 10 pz.)
FOP34 "PRESENZA ACETILENE" (box con 10 pz.)
FOP35 "CARENZA OSSIGENO" (box con 10 pz.)

Detectors test

SOLO A10 - Tester aerosol for smoke detectors

Tester aerosol for fast functional testing of smoke detectors. Contains a chemically safe, non-flammable formula for efficient activation of detectors and minimal detector maintenance. 125 ml pack.

SOLO 330 - SOLO A10 aerosol dispenser

Moulded construction houses SOLO A3 or SOLO A10 aerosol (not included). It has a spring-loaded mechanism for effective aerosol delivery and a clear cup which allows view of the detector LED. Attachment of a telescopic pole (as seen in photo) extends the reach to 9 meters.

SOLO200 - Detector removal/replacement tool

This no-climb tool makes detector maintenance simple. The grips twist into place to create different size combinations for trouble-free access to the majority of detectors. Attachment of a telescopic pole extends the reach to 9 meters.

SOLO461 - Cordless heat detector tester

Battery operated tool for functional testing of heat detectors. Provides efficient activation of detectors by blowing heated air directly at the detector sensor. Attachment of a telescopic pole extends the reach to 9 meters.

Testifire 1001-101 - Kit for smoke and heat detectors

Test kit for smoke and heat detectors, one device for both technologies. The smoke stimulus comes in non-pressurized capsules thus avoids the inconvenience of carrying pressurized aerosols.

The kit includes:
n°1 testFire 1000-001 appliance
n°1 TS3-001 Smoke test capsule
n°2 poles/battery
n°1 fast charger

Testifire 6001-101 - Kit for smoke and heat detectors

The kit includes all the items mentioned in the 1001-101 kit plus:
n°1 4.5m fibreglass telescopic pole

n°1 200-001 tool for the removal of detectors from bases
n°1 610-001 protective carrying bag

TS3-6PACK-001 - Replacement capsule for smoke

Testifire generates a non-toxic smoke stimulus from a capsule, sufficient for between 500 to 1000 tests.

SOLO365 - Smoke Detector Tester

New SOLO365 is a smoke detector tester kit based on a cartridge for aerosol generator and no longer need spray can. Powered by internal Lithium Ion Battery Pack.
The Solo 365-001 Electronic Smoke Detector Tester kit contains:

SOLO 356 Head Unit x 1;
SOLO 370 Lithium Ion Battery Pack x 1;
SOLO 371 Smoke Generator x 1;
SOLO ES3 Smoke Cartridge x 1;
SPARE 1060 SOLO Charger and USB Lead.

E63-12PACK-001 - SOLO 365 Smoke Cartridge

For use with SOLO 365 Electronic Smoke Detector Tester Supplied in Packs of 12.

SmokeSabre - Smoke Aerosol (hand-held)

Spray can for smoke detector test, suitable for hand held use, include a telescopic dispenser for better smoke flow direction.

SOLO100 - Telescopic pole: 4.5 m

Extends from 1.26m to 4.5 m by means of 4 easy-lock telescopic sections. This tool extends the reach to 6m and can be further extended to 9m by attaching 3 SOLO 101 poles.

SOLO101 - Single pole

This tool is 1.13 m long and is ideal for reaching detectors mounted no higher than 2.5m or for extending the SOLO 100 telescopic pole.

SOLO108 - Telescopic pole: 2.5 m

Extends from 1.26m to 2.5 m by means of 2 easy-lock telescopic sections. This tool extends the reach to 4m and can be further extended by attaching a SOLO 101 pole.

Connection cables

LINK232F9F9 - Serial cable

RS232 connection cable between a PC and INIM control panels.

LINKUSBAB - USB cable

USB connection cable between a PC and SmartLoop control panels.

LINKUSB232CONV - Cable with RS232

USB conversion adaptor for connections between a PC and INIM control panels.

Probe-TH - Thermal probe

Thermal probe for battery charge optimization.

SOFTWARE

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLook

Supervisory software

SmartLook is a software package for the centralized supervision and management of INIM's fire detection and intrusion control systems. It offers a vast application spectrum. Its modularity makes it ideal for industrial, commercial and even small residential applications. A typical application is the centralized supervision of several installations located in different buildings or even different places. Other classic applications are hotel receptions, congress centres, shopping malls and all places where the constant supervision of a fire/security system requires operators to provide prompt response to alarm events. Its flexibility allows it to supervise analogue addressable control panels from the SmartLoop series, and conventional panels from the SmartLine series. The true potential of SmartLook can be seen when it is applied to the management of data coming from installations which are geographically apart from each other thus centralizing the management of a distributed system in a single workstation. The SmartLook software, thanks to its user-friendly interface, also plays an important role in home automation when it is applied to the management of a SmartLiving intrusion-control panel. The latter can be managed in the same installation as fire detection panels from the SmartLoop and SmartLine series. The SmartLook supervisory software uses graphic maps connected

together in a 'tree' structure. Each map accepts an arbitrary number of objects. The objects can be supervised elements (detectors, partitions, zones, outputs, etc.), a connection to another map, a connection to a web page (VCR web interface) or a command button with access level control. The operator can interact with the system in real-time. In this way, it is possible to control the status of the inputs, activate the outputs and implement operations such as: arm, disarm, bypass, output activation, etc. The SmartLook software integrates video capabilities and consents to the incorporation of cameras and DVRs with IP network web interfaces. The SmartLook software is capable of importing the system configuration by reading it directly on the control panel, or importing it from the database of the SmartLeague software thus reducing programming time considerably. The system provides uncomplicated self-diagnosis functions which allow the operator to verify the status of communication between the software and control panels. It is also capable of managing different access levels. The SmartLook software comprises two separate applications. One which allows the installer to configure the system and the other, dedicated to the user, which provides all the necessary supervisory functions.

ORDER CODES

SmartLook/F01L	Fire Licence – Licence for the management of one Previdia, SmartLoop or SmartLine fire detection control panel. Non-Expandable.
SmartLook/F01E	Licence for the management of one Previdia, SmartLoop or SmartLine fire detection control panel. Expandable Licence.
SmartLook/F02E	Licence for the management of two Previdia, SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/F05E	Licence for the management of five Previdia, SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/F10E	Licence for the management of ten Previdia, SmartLoop or SmartLine fire detection control panels. Expandable Licence.
SmartLook/I01L	"Lite" Intrusion Licence - Licence for the management of one SmartLiving intrusion control panel. Non-Expandable Licence.
SmartLook/I01E	Licence for the management of one SmartLiving intrusion control panel. Expandable Licence.
SmartLook/I02E	Licence for the management of two SmartLiving intrusion control panels. Expandable Licence.
SmartLook/I05E	Licence for the management of five SmartLiving intrusion control panels. Expandable Licence.
SmartLook/I10E	Licence for the management of 10 SmartLiving intrusion control panels. Expandable Licence.

* Microsoft® and Windows® are registered trademarks of Microsoft Corporation.

Control panel configuration software

The development team at INIM, driven by the awareness of the increasingly important role played by PC software in today's fire detection systems, set out with one goal in mind: to create software that simplifies programming and diagnostics. In fact, programming greatly benefits from the use of the interactive capabilities and outstanding clarity that PC software can offer.

SmartLeague

Programming and management software for INIM devices

Programming and management software for SmartLine, SmartLight and SmartLoop control panels. SmartLeague is an application package for the programming, management and control of a vast range of INIM products. The applications contained in the package allow you to manage fire-detection control panels from the SmartLine, SmartLight and SmartLoop range. Integrated in the same package are applications for the management of INIM's intrusion-control systems and in particular for SmartLink and SmartLiving series products. The package consists of distinct applications that retain the same operating and interfacing modes. SmartLeague manages the connection to the control panels via RS232, USB or TCP/IP and allows remote maintenance over the Internet. By means of an intuitive and functional graphical interface SmartLeague offers truly innovative diagnostic functions. It allows you to interact directly with the control panel in order to detect wiring faults; update the configuration of devices connected to the loop; modify the addresses and also display the operating parameters. In addition, the SmartLeague software provides system status monitoring functions for real-time viewing, on high-performance graphic screens, of the status of the devices connected to the Loops, the status of the zones, the status of the timers, etc. This software can be downloaded for free by signing in and registering at www.inim.biz

Previdia/STUDIO

Programming and management software for Previdia control panels

The Previdia/STUDIO configuration and management software is an indispensable tool for system commissioning and maintainance. Simple and intuitive, it allows you to quickly and effectively adjust the operating parameters of each single element of the system, define the activation logic and configure the various components of the installation. It can operate both on single control panel level or network level and uses a graphical interface especially designed for use on touch-screen devices. The software is completed with effective diagnostic functions for accurate troubleshooting and adjustment of the various intervention thresholds.
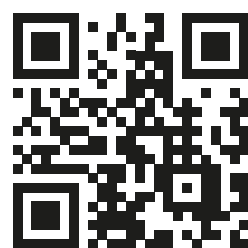
Equally effective are the reporting functions that, starting from the data collected automatically by the control panel, allow the generation of reports in compliance with the laws in force. The software also manages a database that is capable of collecting and storing the data of each installation, including reports for each customer regarding all maintenance and tests performed on the system. Previdia/STUDIO software is capable of connecting to the system via RS232, USB or TCP/IP connection, it runs in Windows operating systems and can be downloaded free of charge by signing in and registering at www.inim.biz

F-COM/STUDIO

The "F-COM/STUDIO" PC software can be obtained free of charge from the Inim Electronics website. This software will allow you to configure quickly and with ease all the parameters of the new communicator as well as manage a database containing all the configurations of your customers.

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Software

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