



## FIRE DETECTION


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GENERAL CATALOGUE

**inim**

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The background of the page is a blurred, orange-tinted photograph of a modern office hallway. The hallway has glass walls on the right side, reflecting the interior. Two people, a woman in a white top and a man in a red shirt, are walking away from the camera down the hallway. The ceiling has recessed lighting, and the floor is a light-colored tile.

Inim fire detection systems protect spaces from the risk of fire and explosion and ensure high precision in detection, alarm signalling, fire extinction and evacuation from the premises. 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

08	Technologies
10	Analogue-addressable detection Previdia series control panels
32	Inim Fire - app for management of Previdia control panels
34	SmartLoop control panels
44	SmartLight control panels
48	Enea - detectors and accessories
56	Argus - detectors and accessories
60	Apollo - detectors and accessories





## 62 Conventional detection

SmartLine Control panels

## 66 Iris - detectors and accessories

## 69 EITK2000

Programming kit for Iris Enea series

## 70 Universal communicator for fire detection systems

- F-COM

## 71 Wireless systems

- Libra

## 72 Special detection

- Linear smoke detectors
- Adapters for duct applications
- Aspirating system
- Flame detectors
- Linear heat detectors

## 79 Gas detection

- Industrial gas detection series
- Elite gas detector series

## 87 Visual/Audible signaling devices

- Sounders, bells, flashers and fire signs
- Ivy
- Smarty

## Emergency Lighting

- Harper
- Diva, Dexia
- HP100, HP200
- SpotLED, ConvertLED, VeraLED
- HP320, HP330

## 106 ATEX equipment and fire-extinguishing accessory devices

### Accessories

- SmartLevel
- Power stations and Modules
- Hold open electromagnets
- Ancillary devices
- Detectors test
- Connection cables

## 112

## 122 Software

- SmartLook
- SmartLeague
- Previdia/STUDIO
- F-Com/STUDIO

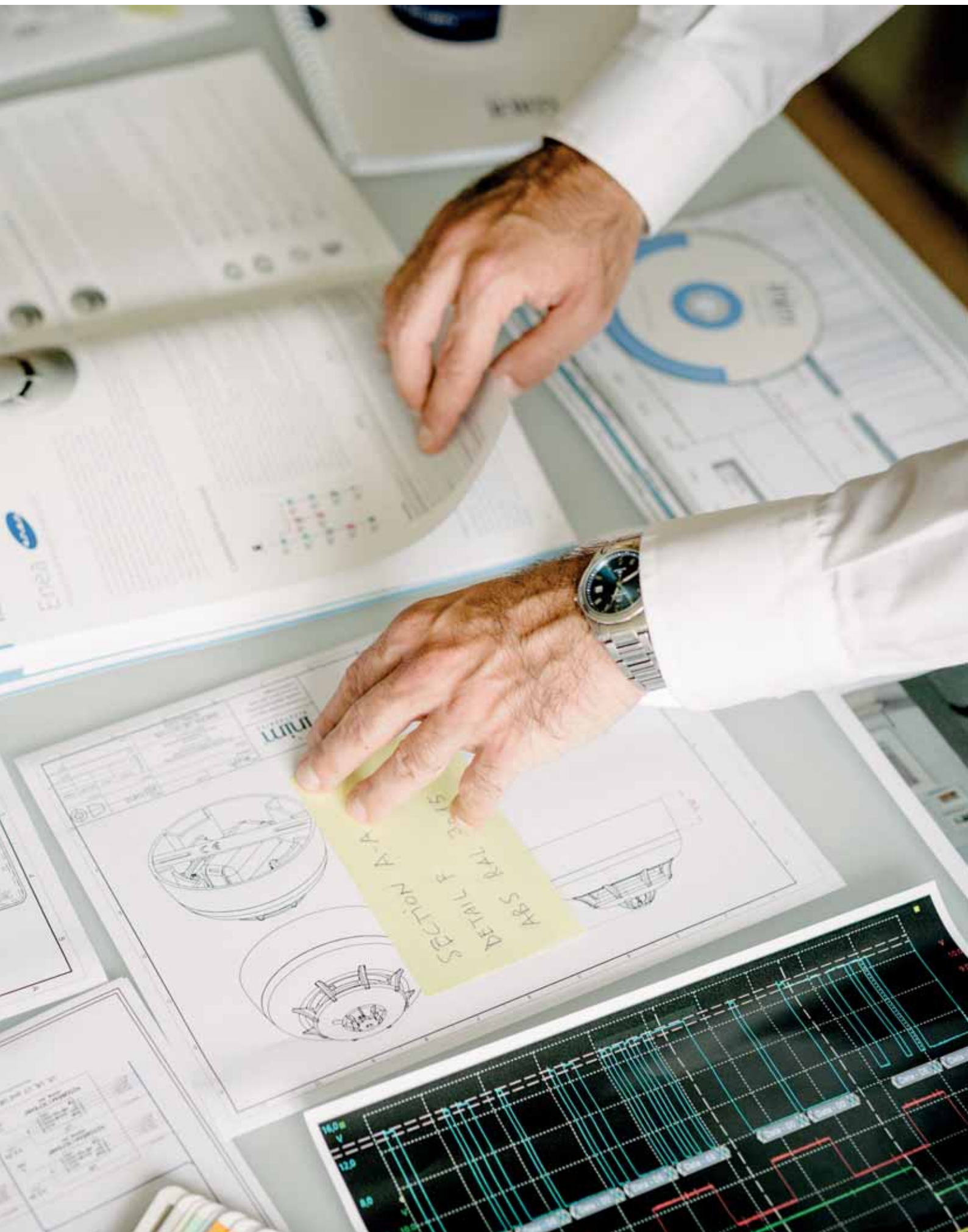


## Made in Inim. Made in Italy.

The energy of an Italian company in continuous evolution.  
The innovation of intrusion, fire detection 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 of having us by your side.







# 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 outcome of the concerted efforts of the R&D professionals at Inim. In fact, this technology can manage different brands of field devices without need of any intervention on the control panel hardware. This is the most high-tech approach to device management available on the fire security market to date. In fact, the loop is '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 Inim's Enea analogue detector series.

**OpenLoop®**

## HorNet and 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.

**HorNet®**

**HorNet+**

## 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 Max series control panels.

**Emergency54®**



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## Janus

Janus technology allows you to interface the world of Inim products with the outside world 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, IFMLAN and PREVIDIA-C-COM 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, Janus technology 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.



## 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 (EITK1000 or EITK2000), 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.



## Cloud technologies

All the Previdia series control panels can be connected to the Inim Cloud Fire. The Cloud service applied to fire detection and alarm systems is completely free of charge. It allows two profiles, Installer and User, to remotely control their systems and overcomes all types of networking problems by making all the control panels reachable from any location. The Inim Cloud Fire provides video verification functions via IP cameras and event location and system management via topographic maps. Thanks to these features, the Web interface of the Cloud is configured as an actual Building Management System for the monitoring of an unlimited number of installations, points and zones involved in signalling, function buttons and customizable status icons. Additionally, the video-verification function allows instant real-time verification of the conditions in areas affected by signalling, thus ensuring secure,

fast and effective management of alarms even from remote locations. Additionally, the Inim Cloud Fire allows you to keep a continuously updated system log, as required by current legislation, on which all the events saved by the control panel (to which notes can be added and signed) maintenance and test operations and any relevant event encountered by those responsible for security management are recorded (manual entries). Finally, Inim Cloud Fire records in detail the test operations performed on each individual detector and allows you to maintain a test report archive which can be consulted by both the installer and the user. It automatically provides diagnostic reports capable of indicating whether all periodic maintenance operations on each individual system element have been carried out, thus allowing the installer to make a work plan and the user to keep check on system maintenance.



## The Previdia Series

PREVIDIA<sub>MAX</sub>

PREVIDIA<sub>COMPACT</sub>



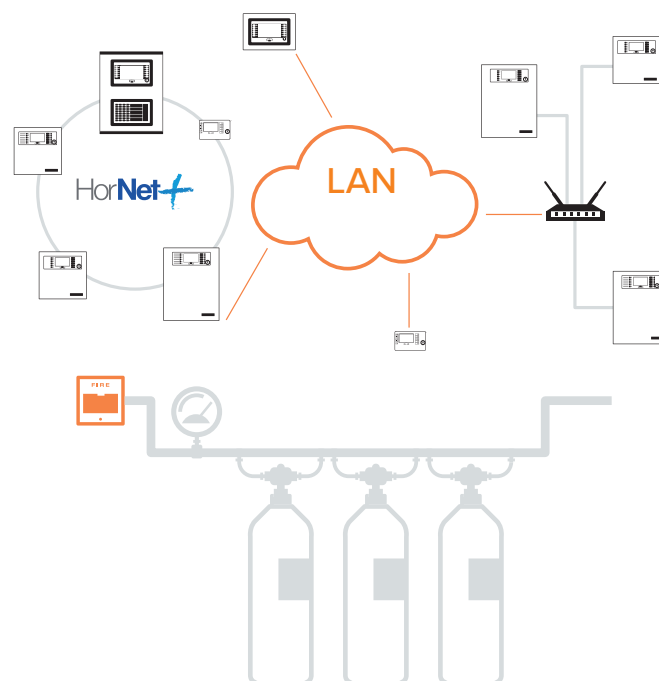
Previdia series control panels are characterized by a uniformity of technical features and a clear and intuitive user interface, they

provide the sector professional with a scalable, intuitive and reliable tool with which to successfully face market challenges.

## Networking

All the control panels can be interconnected together in a network through RS485 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.



## 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

Thanks to management of latest generation technologies, such as TCP-IP, 3G, wired telephone lines, Web etc., systems based on control

panels from the Previdia range are easily supervised remotely and guarantee complete control of the danger in every situation.



## Inim Cloud Fire

All the Previdia series control panels can be connected to the Inim Cloud Fire. The Cloud service applied to fire detection and alarm systems is completely free of charge. It allows two profiles, Installer and User, to remotely control their systems and overcomes all types of networking problems by making all the control panels reachable from any location. Moreover, the Inim 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. Finally, the Inim 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 automatically provides diagnostic reports capable of indicating whether all periodic maintenance operations on each individual system element have been carried out, thus allowing the installer to make a work plan and the user to keep check on system maintenance.



## Inim Fire App

Inim Fire is the free App that you can download from the iOS and Android stores, aimed at both professionals (installers and maintenance technicians) and end users (installation managers, security supervisors, etc.), it allows you to manage all Previdia series control panels that are connected to the Inim Cloud Fire. Thanks to its simple,

intuitive interface and the use of 'push notifications,' the Inim Fire App provides an instantly understandable overview of what is happening on all the systems you have access to. By simply tapping a few times on the screen, you can scroll through the details and navigate the status of each element of the system.



## Certifications

All the components of the range are accompanied by certifications issued by the most prestigious certification bodies

in the field of fire detection and according to all applicable regulations:

EN54-2	Control panel and signalling devices
EN54-4	Power supply units
EN54-21	Alarm transmission and remote fault signalling and warning equipment
EN12094-1	Gas extinguishing system components – automatic electrical command and shutdown and delay management devices
EN54-13	Compatibility of system components

# Previdia Max

## PREVIDIA|MAX

Previdia Max is a modular system for the realization of fire detection systems (and extinction systems). Previdia Max control panels can comprise a single cabinet or multiple cabinets (max. 4) hooked 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 consideration of their field of use which is decisive for the safety of people and the respective mandatory regime, certifications are a fundamental 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 panel and signalling devices
EN54-4	Power supply units
EN54-21	Alarm transmission and remote fault signalling and warning equipment
EN12094-1	Gas extinguishing system components – automatic electrical command and shutdown and delay management 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 Max simplifies configuration, management and maintenance of the system

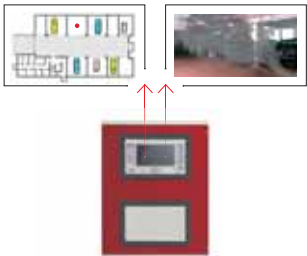
and makes almost effortless what was until today time consuming and complicated.



### 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 Max drastically reduces response times during moments of real danger and greatly reduces the false alarm rate.



## Highly flexible

Thanks to its modular architecture, Previdia Max 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 of 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 Max guarantees unmatched

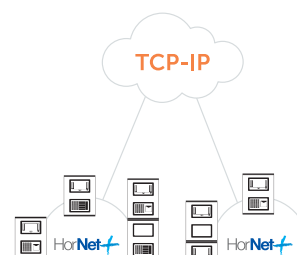
reliability. The security of the system is no longer entrusted to a single processing unit but to a group of interconnected CPUs which operate in synergy to provide the fastest and most effective response.



## Highly articulated

Thanks to its powerful network architecture, Previdia Max 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

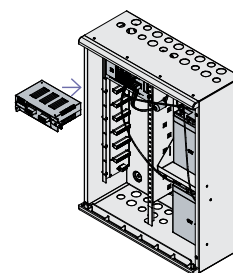
unprecedented cover. Each cluster of control panels interconnected through a Hornet+ network can support up to 48 control panels, and up to 20 clusters can be connected through a TCP/IP network.



## Highly robust

Thanks to HOT SWAP technology, modules can be added or replaced without shutting down the system, thus providing Previdia Max with a fast,

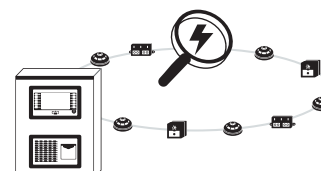
safe method of intervention without any services interruptions.



## Highly reliable

Thanks to loop control modules equipped with 'power up boosters,' Previdia Max 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 Max provides a

system that is always under control and in reach. Both for the end-user and control and maintenance personnel.



# The system



## Single cabinet systems

If the Previdia Max 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
IFMEXT	Extinction channel status module, to be used when the control panel is equipped with IFMEXT modules for the management of automatic extinction systems
FPMCPU	CPU module (identical to the primary unit) configures itself automatically 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 with 16 low-power Inputs/Outputs
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 extinction-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).

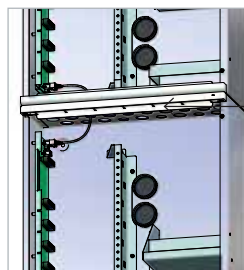
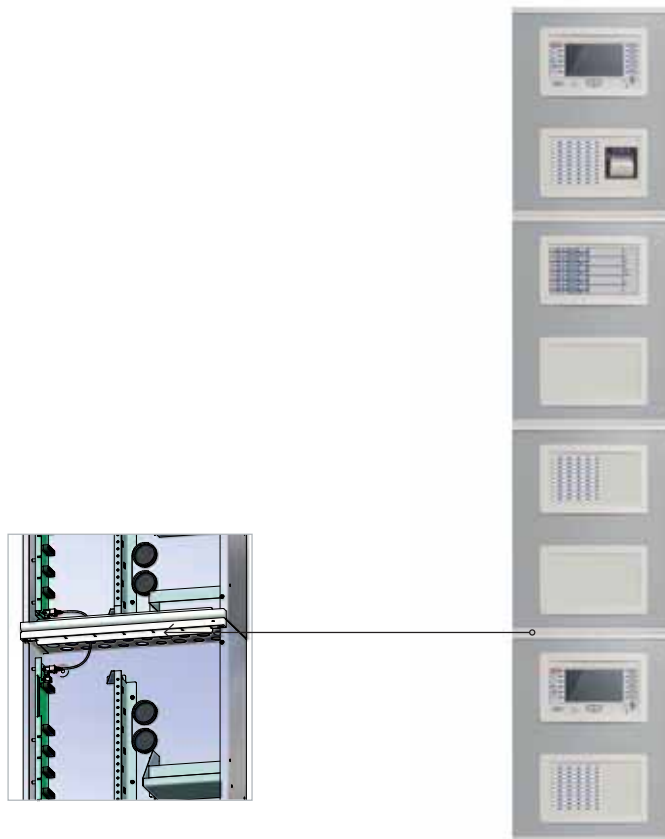


## Multi-cabinet control panels

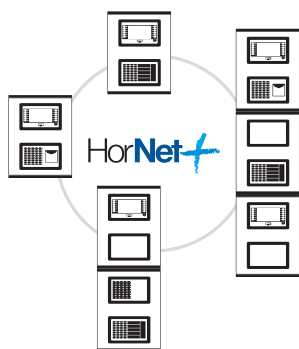
In order to expand the capacity of each control panel, several cabinets (maximum 4) can be assembled together to form a cabinet of increased dimensions.

The cabinets can be assembled together by means of the mounting screws (supplied), once assembled the CAN DRIVE bars can be connected together using the wire (supplied). The assembled cabinets provide the respective number of housings for the front plate and CAN DRIVE bar modules.

Each cabinet can house an IFM24160 power-supply module. A control panel with more than one IFM24160 power-supply module will have a total current equal to the sum of the maximum currents of the installed power-supply modules. The power-supply modules will share the load current automatically.



## Control panel network



### Control panels 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).

## Previdia216

PREVIDIA<sub>MAX</sub>



Each installation must start from a basic control panel to which, when necessary, can be added function modules, cabinets and accessory devices. Previdia216 is an analogue-addressable

control panel that can be networked for automatic fire detection and alarm signalling systems.

Configuration of the base control panel:

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### Metal cabinet

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N°1 FPMCPU module – control unit with display

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

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N°1 IFM2L – 2 loop management module

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## Previdia216R

The same as Previdia216 but comes in a red cabinet.



## Accessories

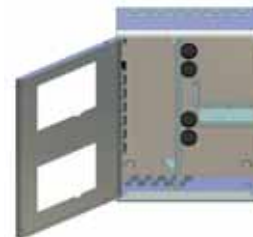
A vast selection of accessory items and devices allows easy expansion of the control panel (Add-on cabinets) or assembly of installations in accordance with wiring needs.

### 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.

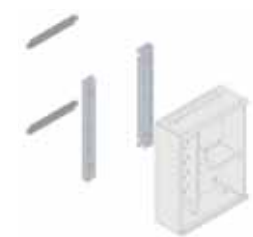


### PRCABSP

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 CASE FOR THE PREVIDIA SYSTEM

Demo Case for Previdia Max System, practical case containing Previdia216 control panel and

several already-connected loop devices. Useful for technical trainings.



### ORDER CODES

**INDSIN1PPRAEDEM0** Demo luggage.

## FPM Modules



The modules from the FPM series are housed on the cabinet front plate, maximum 2 per cabinet.

### FPMCPU

Main control unit for Previdia Max 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 Max control panel

can house 2 of these units (a main unit and a secondary unit as backup). Mounts to the front plate 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.

## FPMLED

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

Mounts to the front plate 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** Light-grey coloured plastic.  
**FPMLED-G** Dark-grey coloured plastic.

## FPMLEDPRN

Module equipped with 50 tri-colour LEDs as per the FPMLED module and an 80mm printer. It provides real-time printouts of all system events. It is to be installed on the front panel and

connected to the CAN DRIVE bar if housed in the upper slot, or connected to the FPM module if housed in the lower slot.



### 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, it is mandatory to use one or more FPMEXT modules to visualize the status as indications separate from the display. Each FPMEXT module

provide the indications of 5 IFMEXT extinction modules. Mounts to the front plate 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

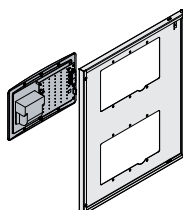
cabinet when certain functions are not required.



### ORDER CODES

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

## FPM module assembly



## IFM function modules



IFM series modules are to be installed on 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. It connects to the mains power supply and supplies a maximum 4A current to the system. It houses a 1.5A battery charger capable of maintaining under charge two 17Ah or 24Ah batteries. It offers two supervised outputs and a configurable relay output (at factory default

configured as Alarm output, AUX output and fault signalling relay). It accepts 230Vac or 115 Vac 50/60 Hz input. Only one power supply module can be housed inside each metal cabinet. Each control panel manages a maximum of 4 power supply modules (one for each eventual 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

Configurable 4 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 supplying 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 dialer module communicates over the PSTN landline and GSM network, it is 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 – GSM antenna not supplied. 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. It allows a second connection of the control panel to the Ethernet network and provides the following services:

- web Server for system control, management and maintenance
- e-mails containing events details
- IP ONVIF camera interface for video verification
- remote communications via SIA-IP protocol
- BACnet\* protocol (subject to licence)
- ESPA444 protocol
- management of voice evacuation systems

Each control panel manages one IFMLAN module only.



## IFMEXT

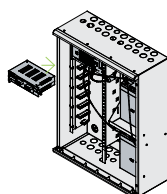
Gas extinguishment-system management module Provides terminals for the management of devices which are commonly requested in this type of installation together with the adequate activation logic. The various functions available on the terminals can be replicated on devices connected to the loop (with the

exception of 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.

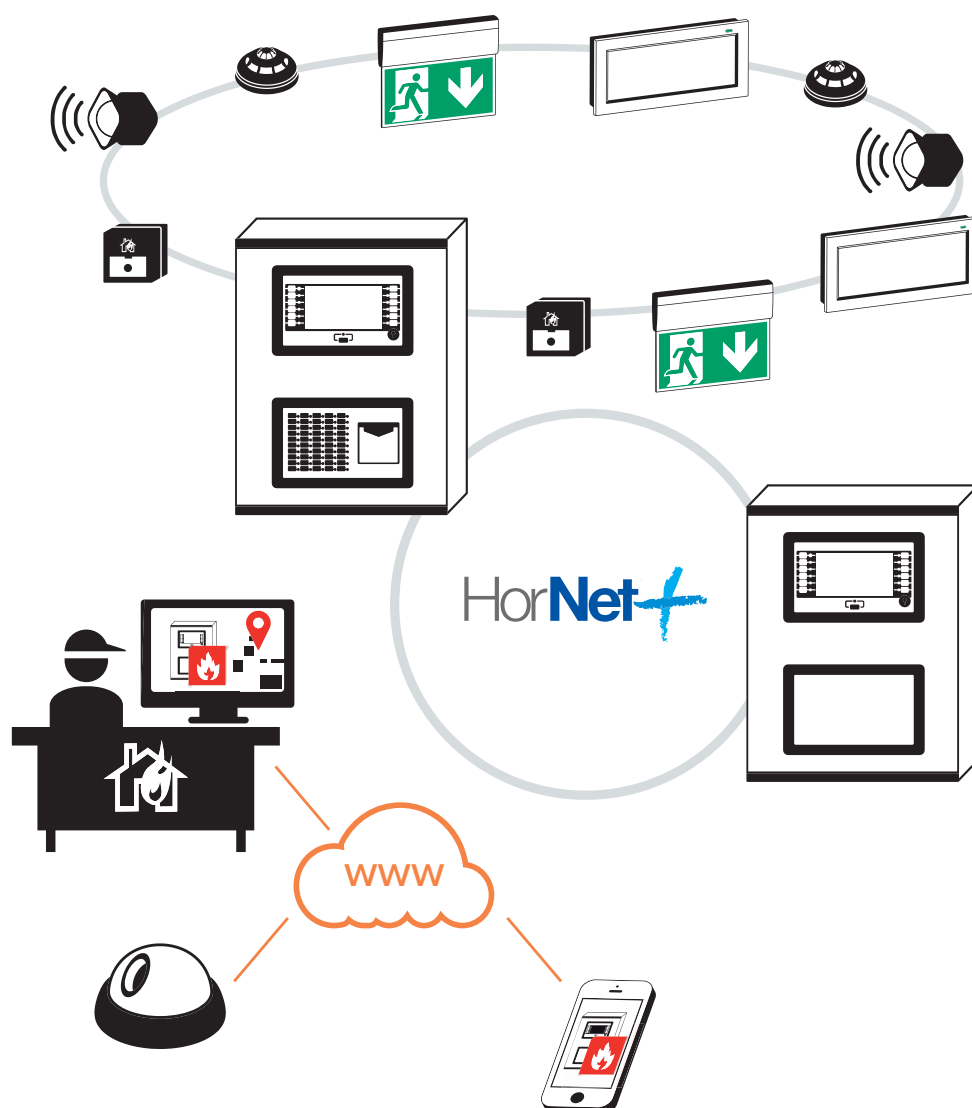


## IFM module assembly

\* Refer to software section.



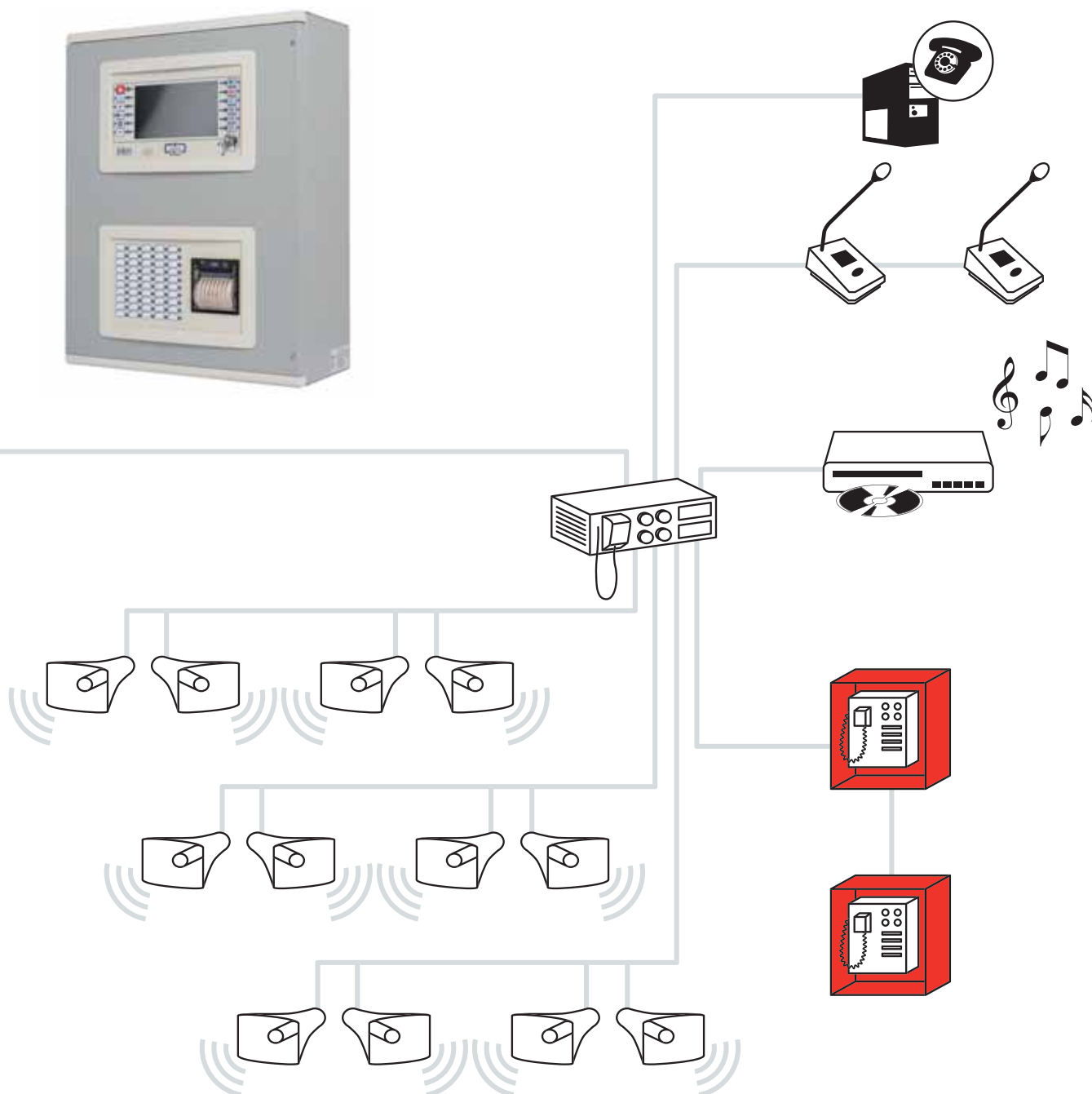
## Voice evacuation systems



The growing demand for voice evacuation systems for use in conjunction with automatic fire detection and fire alarm systems has led Inim 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 Max 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. The addition of the voice evacuation system to the Previdia Max control panel via Inim's connection BUS, provides many advantages:

- both systems can be supervised from a single point (even remotely)

- in the event of a fire emergency, routine sound diffusion (background music, commercial announcements) will be blocked instantly
- the appropriate messages can be played on each zone (Warning, Evacuation, End of emergency)
- it is possible to organize even complex evacuation plans, by outlining orderly, coordinated evacuation of the premises guided by the activation of appropriate messages to be broadcast in the various areas depending on the area where the danger is detected
- wiring, programming and maintenance are all greatly simplified











# Previdia Compact

## PREVIDIA COMPACT

The analogue-addressable control panels from the Previdia Compact series represent the ideal solution for small to medium installations, combining inside a compact cabinet the innovative features of the Previdia Max system and a unique ease of use. Programming from the display through a clear and intuitive user interface allows you to minimize the system activation and maintenance times, making Previdia Compact the ideal choice.



## Certifications

In automated detection and fire 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 panel and signalling devices
EN54-4	Power supply units
EN54-21	Alarm transmission and remote fault signalling and warning equipment
EN12094-1	Gas extinguishing system components – automatic electrical command and shutdown and delay management devices
EN54-13	Compatibility of system components

## Simple installation

Thanks to the 4.3" graphic colour touch-screen, the configuration and maintenance of the system is simple and fast, the intuitive interface and the complete programmability of all the

essential parameters provide a tool that is unmatched by other control panels available 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

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

- Small, with 1.5A power supply and 7Ah batteries

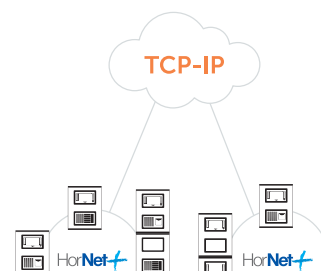
- Large, with 4A power supply and 17Ah batteries



## Networkable

Previdia Compact control panels are HORNET+ network connectable (max. 50 nodes). This feature makes it possible to build networks that include Previdia Compact and Previdia Max

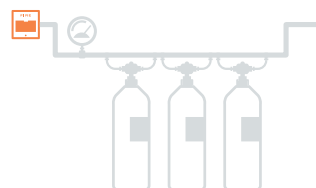
control panels, thus optimizing each node in the network. As well as the HorNet+ network, networking via TCP-IP (MAX 20 Cluster) is also managed.



## Management of extinguishing systems

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 via TCP-IP. 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 front plates for clear indications

The control panels come in different models with three different front plates which provide the necessary indications for easy user understanding.

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





## 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: <b>Previdia-C</b>
NUMBER OF LOOPS	200	Loops capacity: <b>200</b> = 2 loops 240 device each <b>100</b> = 1 loops 240 devices <b>50</b> = 1 loops 64 devices
CABINE SIZE	S	Size of cabinet, power supply, battery: <b>S</b> = 325x325x80mm - 1.5A - 2 x 7Ah <b>L</b> = 497x380x87mm - 4A - 2 x 17Ah
ZONE STATUS LED MODULE	Z	Zone LED <b>Z</b> = zone LED available .= zone LED not available
EXTINCTION CHANNEL	E	Extinction <b>E</b> = 1 extinction channel .= no extinction
CABINET COLOUR	G	COLOUR <b>G</b> = grey <b>R</b> = red

MODEL	LOOP CAPACITY			CABINET		ZONE STATUS LED	EXTINCTION MANAGEMENT
	1 LOOP OF 64 POINTS	1 LOOP OF 240 POINTS	2 LOOPS OF 240 POINTS	SMALL WITH POWER-SUPPLY @ 1.5A AND 7Ah BATTERIES	LARGE WITH POWER-SUPPLY @ 4A AND 17Ah BATTERIES		
C050S	✓			✓			
C100S		✓		✓			
C200S			✓	✓			
C050L	✓				✓		
C100L		✓			✓		
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 attractive compact design, connects to HORNET+ network (double RS485 connection), acts 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 the following versions:

- PREVIDIA-C-REPW: basic version. Enclosure in white plastic

- PREVIDIA-C-REPEW: version with indications relative to an extinguishing channel. Enclosure in white plastic
- PREVIDIA-C-REPR: basic version. Enclosure in red plastic
- PREVIDIA-C-REPER: version with indications relative to an extinguishing channel. Enclosure in red plastic



## PREVIDIA-C-COM

### SERIAL COMMUNICATIONS MANAGEMENT MODULE

The optional PREVIDIA-C-COM module, once installed inside the cabinets of Previdia Compact control panels, provides two RS232 ports and

two RS485 ports for the connection of remote communicators, using the following protocols.



Communication protocol	Available on RS232 ports	Available on RS485 ports	Description
ESPA444	YES	NO	Protocol for interfacing with control panels to pagers, third-party remote communicators
PASO	NO	YES (some models require both RS485 ports)	Protocol for interfacing between the control panel and the Voice EVAC-system
WEB WAY ONE	YES	NO	Protocol for interfacing with WEB-WAY-ONE remote communicators
SMART-485-IN	NO	YES	Communication protocol with the Inim SMART-485-IN module which allows connection to the standard interface panels required in some countries
LOG ON SERIAL - ASCII PRINTER	YES	NO	Sends events to the port in real time in ASCII format (to a printer or receiving devices)
LOG ON SERIAL - SMART LOOP FORMAT	YES	NO	Sends events to the port in real time in the format used by SmartLoop series control panels
LOG ON SERIAL - PLUS II PRINTER FORMAT	YES	NO	It sends events to the port in real time in compatible format for Custom PLUSII printers
LOG ON SERIAL - WITHOUT CONTROLS	YES	NO	Sends events to the port in real time in ASCII format without any control for the printers

## PREVIDIA-C-COM-LAN

### SERIAL COMMUNICATIONS MANAGEMENT MODULE AND ADVANCED 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 connection to the Ethernet network, by means of this second connection (the motherboard and the module must both be connected to the same network) the following advanced TCP-IP functions are implemented:

- E-mail management
- Interactive WEB page with graphic maps for full management of the control panel
- Video-verification through connection to IP cameras with ONVIF protocol
- BACnet protocol (subject to PRE-BAC-LIC licence)
- Interfacing to EVAC TUTONDO systems (via TCP-IP)



## Technical features

- Compact analogue-addressable control panel capable of managing 1 x 64-point loop, 1 x 240-point loop or 2 x 240-point loops (depending on the model)
- Multiprotocol, it manages Inim, Apollo and Argus security protocols on the loop
- Integrated 1.5A or 4A power supply (depending on the model)
- Integrated 7Ah or 17Ah battery charger (depending on the model)
- Sturdy metal cabinet with front plate in plastic
- Terminals for connection in a HORNET+ network 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 configuration
- Management of a micro-SD card for the visualization of topographic maps, saving and retrieving of configurations, and storing of the events log
- 4 on-board I/O channels configurable as 1A supervised power outputs, supervised inputs
- On-board configurable relay
- 4.3" graphic colour touch screen
- Function keys in silicone for basic functions
- 30 multicolour LEDs included (depending on the model) for displaying the status of the first 30 zones or configurable
- Management of a gas-extinguishing channel (depending on the model), certified EN12094-1
- Programmable from the front plate or via the Previdia/STUDIO configuration software available on the Inim website
- 1000 configurable zones
- 1000 output groups 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 events
- Management of up to 100 access codes
- Customizable display with images, status indication icons for the various elements, text and function buttons
- Management of evacuation matrices.

# Previdia/STUDIO

Programming and control software for Previdia control panels



The Previdia/STUDIO configuration and control software is an indispensable tool for the commissioning and maintenance of Previdia series control panels. Simple and easy to use, it allows you to quickly and effectively adjust the operating parameters of each individual element of the system, define the activation logics and configure the various system components. Capable of operating both at individual control panel and network level, it makes use of a graphic interface designed to be used also on touch screen devices. The software is completed with effective diagnostic functions that allow accurate fault searches and the adjustment of the various intervention thresholds. Equally as

effective are the reporting functions which allow, starting from the data automatically collected by the control panel, the creation 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 is capable of connecting to the system via RS232, USB or TCP/IP connection, runs in Windows operating systems and can be downloaded free of charge by logging in and registering on website [www.inim.biz](http://www.inim.biz).

## BACnet licence

BACnet is a building-automation-network communication protocol developed by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers). BACnet, as a result of its versatility and flexibility, is now extensively used as a standard communication protocol between devices and building-automation systems made by various 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.

# Inim Fire

App for management of Previdia control panels



Inim Fire is the free App that you can download from the iOS and Android stores and that allows you to manage all Previdia series control panels that are connected to the Inim Cloud Fire.

## For professionals and end users

Inim Fire is aimed at both professionals (maintenance technicians, installers) and end users (installation managers, security supervisors, etc.). It offers essential functions for secure, fast and professional management of installations tailored to suit both categories.

## PUSH notifications

The Inim Fire App is capable of sending real-time 'push' notifications to warn both users and maintenance technicians of any events recorded by a fire detection system.

## Remote control of installations

Thanks to its simple, intuitive interface, the Inim Fire App provides an instantly understandable overview of what is happening on all the installations you have access to. By simply tapping the screen allows you to view the complete details of each report. The App allows you to navigate amongst the various installations associated with your account and access the details of each individual control panel to the point of being able to supervise

## Graphic maps

The Inim Fire App, in addition to its intuitive and captivating graphics, offers a graphical visualization based on navigable multiple-level topographic maps that show interactive, customizable icons that provide instant awareness of the status of each zone, detector or element of the system. The possibility to select an icon and issue commands to the



and manage every single zone, detector or device in minimum detail. The functions for remote control of alarm and fault communicators, timers, output groups etc., make the Inim Fire App a valuable tool for the remote management of all situations in total security.



associated element as well as the possibility to set up function keys for fast actions are definable during the installation phase, thus making the Inim Fire App a revolutionary tool for worry-free management of fire systems.



## Video verification

The Inim Fire App is capable of showing on your smartphone images captured by any IP camera installed on the site, thus offering a visual aid that allows you to verify instantly, effectively and in real time the extent and effective risk of the reported danger.

Thanks to ONVIF protocol management capabilities the control panels can communicate with any type of IP camera and, if necessary, control pan, tilt and zoom movements based on the location of the danger and then send the relevant image to your smartphone.



## Events Log and Installations Registry

The Inim Fire App allows you to view both the events log, which contains all the events recorded in detail by the control panel, and the 'installations registry' in which converge all the most significant automatically-recorded events (alarms, faults, bypass operations, etc.) and any events entered manually by users and maintenance technicians (maintenance operations, tests, fire drills, personnel training sessions, faults, etc.).

Each element in the 'Installations registry' can be commented on by a series of notes and closed with a virtual signature that permanently archives the event.

The 'Installation registry,' which can be printed out on paper and countersigned by downloading it from the Inim Cloud Fire web page, faithfully coincides with the requirements of current legislation, allowing both the professional and the end user to promptly comply with the current obligations determined by law without any particular effort.

## Walk test

Thanks to a revolutionary guided and assisted walk test function, once the zones to be tested have been selected, the Inim Fire App will show a list of the devices associated to each selected zone with the possibility for each of them of lighting up LEDs

for the localization, testing of detectors, inputs and outputs and will automatically tick the tested devices. An ingenious function that allows the professional to carry out periodic test operations quickly and without risk of forgetting even a single element.

## Maintenance Report Management

At the end of each periodic test or ordinary/extraordinary maintenance session, the professional will be able to compile and archive the relative report on the Cloud as required by current legislation. This can be done by simply downloading and filling in the forms required by law available on the App, or any

other file compiled from a PC or photo of the paper document. The document thus archived will be completed by the Cloud by adding the automatic registration of all tested devices and then entered in the Installations registry in compliance with the legal obligations in force.



Inim Fire







## 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. It offers control panels that provide from 1 to 8 loops which can be connected in a network of up to 30 control panels.

Considering that each control panel can manage up to 8 loops and that each loop can manage up to 240 devices, the enormity of installation solutions offered by the SmartLoop system is not difficult to imagine. 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 possible by the appliance of multiprocessor architecture with self-diagnosis features coordinated 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. This important feature is yet another innovation pioneered by Inim.

In fact, each of the 6 added terminals can be set up to operate as either a supervised output, a supervised input or a conventional detector zone. 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 (single 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 simple installation of the components, the reduced complexity of the interface, the remote programming and diagnostic procedures ensure that the time spent on installation is reduced to a minimum. This combined with the features of scalability, modularity, flexibility and versatility make control panels from the SmartLoop series the ideal solution for various market segments: from medium commercial applications to large installations such as hospitals, shopping malls and airports.



## Main features

- Analogue-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' network architecture between control panels
- Supports Emergency54 emergency configuration (CPU redundancy)
- Up to 30 control panels in the network using the SmartLoop/NET network board
- Accessible over the Internet via a SmartLAN board (optional)
- 2 or 4 wire loop connection
- Supports 240 devices per loop
- Up to 14 remote control panels (repeaters) connectable to the RS485 interface at a maximum distance of 1000m
- 1 supervised alarm output (NAC)
- 1 supervised fault output (NAC)
- 3 programmable supervised outputs (NAC)
- 1 alarm relay
- 1 fault relay
- RS485 BUS for the connection of remote control panels (SmartLetUSee/LCD and SmartLetUSee/LED)
- Manages via RS485 BUS SmartLine020-4EXT and SmartLine036-4EXT extinction control panel
- Manages power stations on RS485 BUS
- 1 24V auxiliary power-supply output for external devices
- 1 24V resettable ancillary power output
- Battery shutdown relay for deep discharge conditions
- RS232 and USB connectors for the connection of a PC
- RS232 connector for the connection of a serial printer
- Memory of the last 2,000 events
- Self-enrolling of loop devices
- Self-addressing of 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 functions
- Fast access keys (test, buzzer, recognition, silence, reset, evacuate)
- Signalling buzzer
- Programming software runs in Windows environment
- Programming from front panel
- Code or key access to Level 2 functions (EN54 compliant)
- Control of the output voltage of the power supply section in accordance with the battery temperature read by the ProbeTH device
- Battery efficiency test
- Extensive application of SMD reflux technology for higher reliability
- Metal enclosure
- Mains power supply 230Vac  $\pm$  10%
- Switching power supply/battery charger 4A @ 27.6Vdc
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 480x470x135 mm.
- Weight (without batteries): 8 Kg

## ORDER CODES

<b>SmartLoop1010/P</b>	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.
<b>SmartLoop2080/P</b>	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.
<b>SmartLoop1010/G</b>	Control panel with 1 loop, non-expandable, equipped with command keypad and display.
<b>SmartLoop1010/S</b>	Control panel with 1 loop, non-expandable, with equipped flush front plate.
<b>SmartLoop2080/G</b>	Control panel with 2 loops, expandable to 8, equipped with keypad and display.
<b>SmartLoop2080/S</b>	Control panel with 2 loops, expandable to 8, with equipped flush front plate.

## SmartLoop system enhancement devices connectable on the RS485 BUS

### 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. They should be located in places where it is necessary to provide the possibility of control and visualization. Each SmartLoop control

panel manages up to 14 repeaters that can be connected up to a distance of 1000 m from the control panel. The connection with the control panel is established via the RS485 BUS present on the motherboard of the control panel.



### SmartLetUSee/IP – IP remote control software for SmartLoop panels

The SmartLetUSee IP software is an application that replicates the front plate of the SmartLoop control panel on the PC screen. Communication between the application and the control panel is achieved via TCP-IP protocol, therefore, the SmartLoop control panel must be equipped

with a SmartLAN or SmartLAN/SF board and connected to an Ethernet network. The application replicates all the functions available on the front plate of the control panel, thus providing a repeater panel directly on a PC or Tablet.



### 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. Each SmartLoop control

panel manages up to 14 repeaters that can be connected up to a distance of 1000 m from the control panel. The connection with the control panel is established via the RS485 BUS present on the motherboard of the control panel.



### SmartLetUSee/LED – Remote LED repeater panel

It is a LED display panel. The panel provides 48 freely-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 from 11 to 12 are capable of switching a maximum load of 240Vac, 5A.



## SmartLoop system enhancement devices connectable on the SmartLoop motherboard

### SmartLoop/2L – OpenLoop expansion board

Each expansion board adds 2 OpenLoop loops to the control panel thus offering the possibility to expand each control panel up to a maximum of 8 loops. Up to 3 loop expansion boards can be configured for each control panel. Being OpenLoop technology, each loop can be

configured to work independently with one of the types of devices available. These boards can only be added to expandable models (2080 models) and are not configurable in non-expandable models (1010 models).





### SmartLoop/INOUT – Input and output expansion board

Adding this card to the control panel provides a further 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 network can be made using 3-pole cable ring wiring. Each section (from control panel to control panel) can have a maximum length of 2000m. The network created in this way provides a highly fault-tolerant network. Using a supplementary 2 pole cable (5 poles in all), it is

possible to create a protection ring which can pass alarm conditions coming from a fire control panel with a 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.). The board has an 8 slot audio memory for up to 8 voice-call messages. The two phone lines are monitored and guarantee signalling in the event of line

down faults. Completely managed by its own microcontroller, it guarantees an emergency call in the event of a control panel microprocessor fault. The emergency call is also guaranteed if an alarm occurs when the control panel microcontroller is faulty (Emergency54 technology).



### 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 control panel and to all the connected control panels in the HorNet network. The board is capable of sending detailed e-mails for each event and real-time event reports via TCP/IP.

The board also provides the possibility to carry out remote programming (up-downloading) of data, of managing the system via the SmartLook control software, as well as providing a web server which allows access to the control panel via the Web.



### SmartLAN/SF – Ethernet interface for remote programming

The SmartLAN/SF board connects to any Ethernet network and allows remote access (via Internet) to the control panel and to all control panels present in the HorNet network.

The board provides the possibility to carry out remote programming (up-downloading) of data and of managing the system via the SmartLook control software. Supports Modbus over TCP/IP.



### SmartLoop/PRN – On-front Printer Module

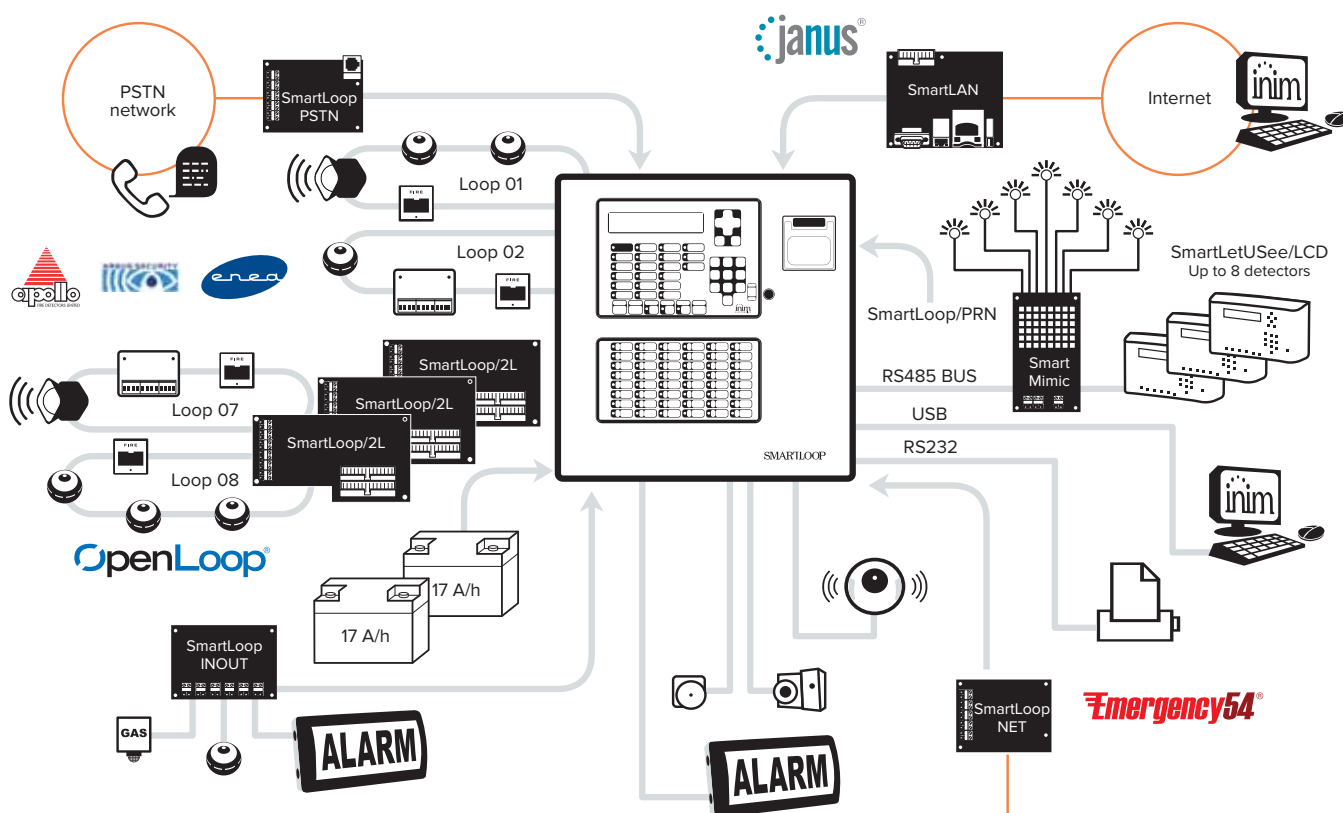
The SmartLoop/PRN printer module is installed on the front plate and is connected, via the cable supplied, directly to the main board of the control panel. It uses 56mm thermal roll paper. The SmartLoop/PRN allows real-time printing of events or on-demand printing of

portions of the control panel event log. It can also print complete loop reports containing information about dust accumulation and detector functionality. The SmartLoop/PRN can be mounted to SmartLoop1010P and SmartLoop2080P models only.

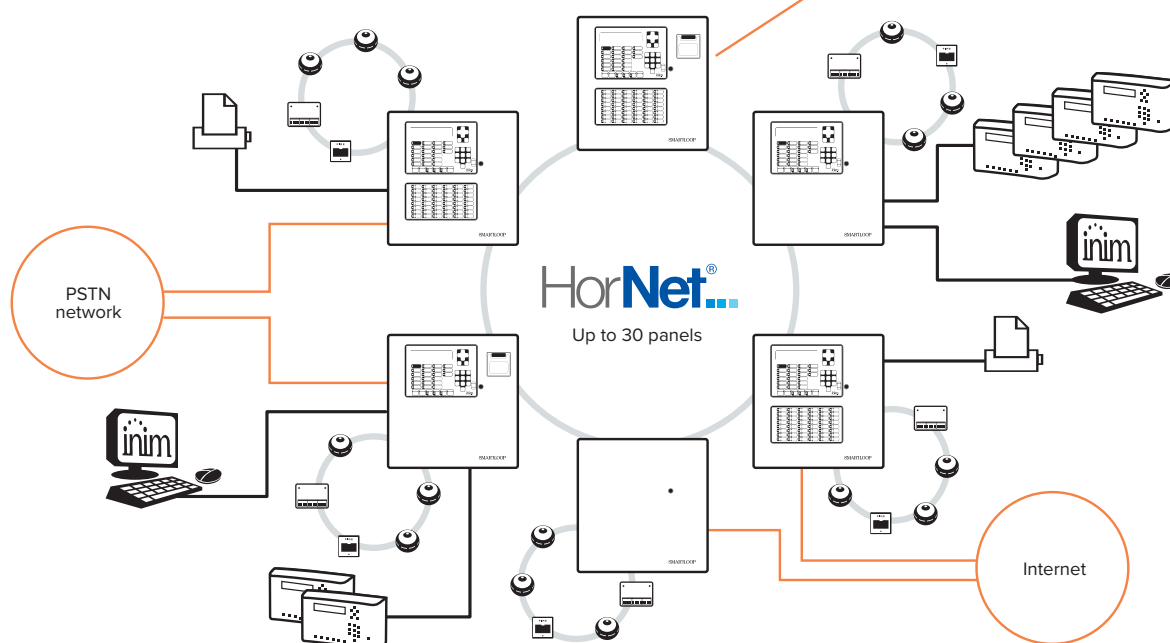


Control panel models	By design		Optional attachment boards					
	Panel LCD display	Panel 48 LED	SmartLoop 2L	SmartLoop PRN	SmartLoop INOUT	SmartLoop NET	SmartLoop PSTN	SmartLAN SmartLAN/SF
SmartLoop/1010 - P	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
SmartLoop/2080 - P	Yes	Yes	Yes (max. 3)	Yes	Yes	Yes	Yes	Yes
SmartLoop/1010 - 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 Panel overview



## SmartLoop Net



**Technical specifications**

Operating voltage	230 Vac -15% + 10% 50/60 Hz
Maximum internal power current	4 A
Max current available for the external load (loop devices, external loads, attachment boards, etc.)	4 A
Battery specifications	12V @ 7Ah o 12V @ 17Ah
Operating temperature	From -5° to +40° C
Dimensions (HxWxD)	48 cm x 47 cm x 13.5 cm
Weight (without batteries)	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
SmartLetUSee/LCD	stby: 40mA MAX:50mA
SmartLetUSee/LED	stby: 5mA MAX:50mA

## SmartLeague programming software

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 configuration of 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 equipped flush front plate.
SmartLoop2080/S	Control panel with 2 loops, expandable to 8, with equipped flush front plate.
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	Land line digital and voice dialler board.
SmartLoopPRN	On-panel printer module.
SmartLAN	Ethernet interface for connection to the Internet via TCP/IP for remote programming and monitoring purposes and Web server.
SmartLAN/SF	Ethernet interface for Internet connections over TCP-IP and remote programming and supervision.
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 36.
SmartLeague	Programming and management software for Inim products (runs on Windows™).
Link232F9F9	RS232 connection cable between PC and Inim device.
ProbeTH	Thermal probe - protects the battery against overheating and consequent permanent damage.
SPS24060G - SPS24060S	Power-supply station @ 24V, 1.5A.
SPS24160G - SPS24160S	Power-supply station @ 24V, 4A.









## 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, early warning, fault, monitor, 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 (or deactivate) their outputs during predefined conditions. Programming the system from the front plate is simple and intuitive thanks to the graphic display. However, it is possible to configure the control panel from a PC via an RS232 serial connection, the simple and intuitive SmartLeague configuration software greatly speeds up the commissioning of the system.

## Accessories

### 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 (for monitoring and management of the control panel power-supply-station outputs) – For details refer to 'Power-supply stations' section.







## Main features

- Single-loop analogue-addressable control panel
- Certified EN54-2 / EN54-4
- Certified EN12094-1 (Fire extinction)
- OpenLoop Technology (multiprotocol)
- 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
- Signalling buzzer
- 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): 325 x 325 x 80 mm
- Weight (without batteries): 3 Kg

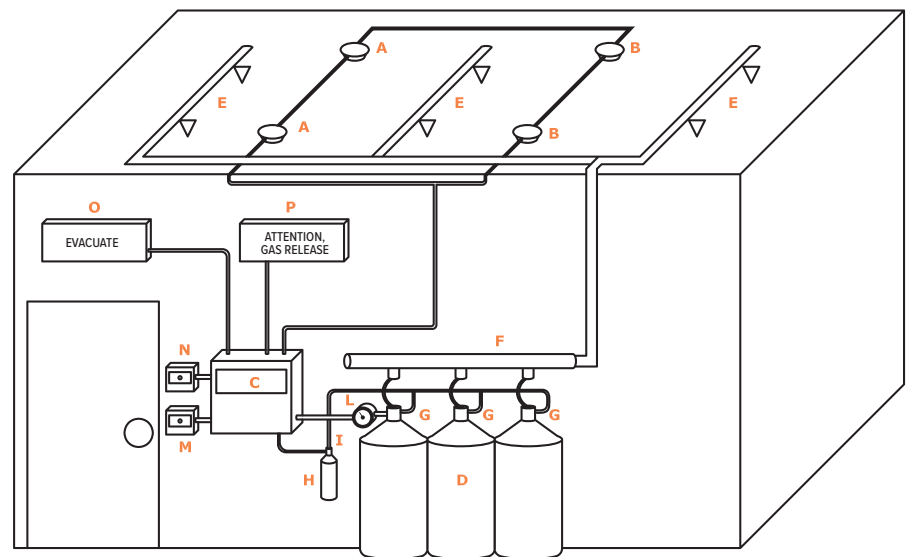
## Extinguishment

The addition of a SmartLetLoose/ONE fire extinction board to any SmartLight series fire control panel provides the system with GAS extinction control capabilities compliant with EN12094-1. The control panel provides all the functions required by law and

allows the connection of the various accessories necessary for the management of a fire extinction system (refer to 'Accessories for fire extinction systems').

### DIAGRAM KEY

- A** Loop (zone A)
- B** Loop (zone B)
- C** SmartLight fire extinction control panel
- D** Extinguishing gas cylinders.
- E** Gas release nozzles
- 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 extinction button
- O** Audio/Visual signaller of imminent gas release
- P** Audio/Visual signaller of gas present



Application diagram

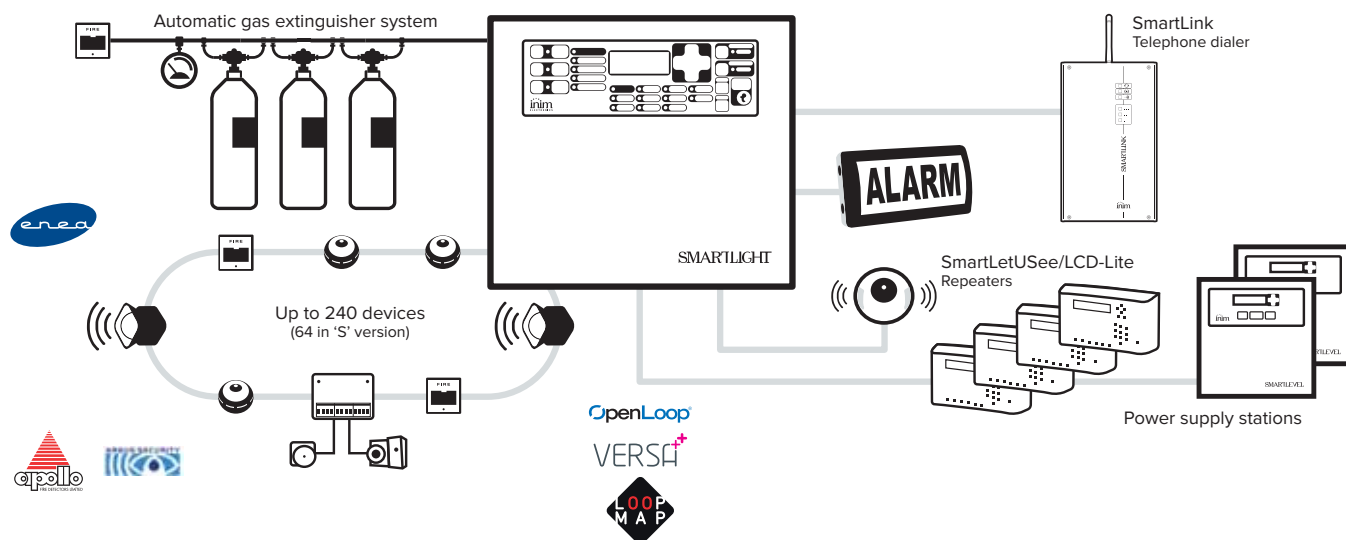
## Main features

- Certified EN12094-1
- Microcontroller board supervised by the CPU
- Signalling 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 the activation of pre-extinction signalling devices
- Supervised output for activation of extinction-in-progress signalling devices.

### ORDER CODES

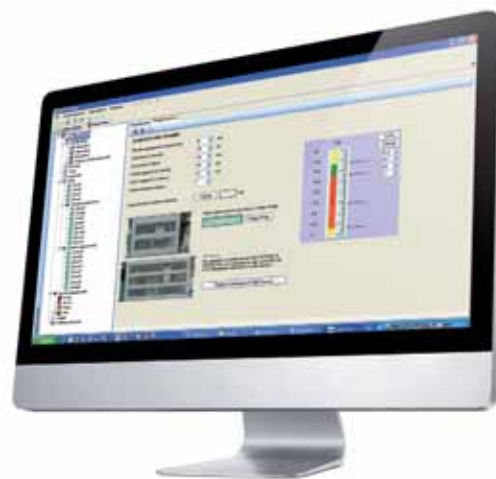
<b>SmartLight/G</b>	Single loop analog-addressable control panel. Up to 240 devices over the loop and 30 zones.
<b>SmartLight/S</b>	Single loop analog-addressable control panel. Up to 64 devices over the loop and 16 zones.
<b>SmartLetLoose/ONE</b>	Extinction board
<b>SmartLetUSee/LCD-Lite</b>	Remote-control repeater panel for SmartLine and SmartLight control panels.
<b>SmartLeague</b>	Programming and management software.
<b>Link232F9F9</b>	RS232 connection cable between PC and Inim devices.
<b>IPS24060G</b>	Power supply module 1.5A @ 27.6Vdc.
<b>ProbeTH</b>	Thermal probe - protects the battery against overheating and consequent permanent damage.

## Application diagram



## 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 configuration of 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.



# Enea

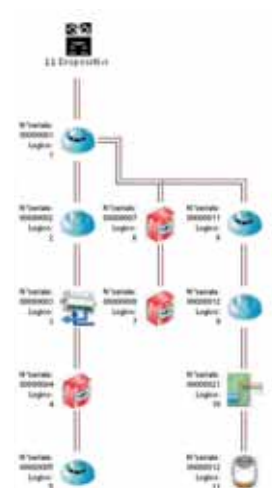
Addressable analogue detectors



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. 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 unequaled 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, therefore, hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen.
- Tri-colour LED: red for alarm, green for stand-by flashing (optional) and for localization by means of manual activation from the control panel, yellow for fault (chamber contamination, short circuit isolator)
- Integrated short-circuit isolator in each device
- 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-minutes period prior to the last alarm detected
- Vast range of settable options
- Bypass plate on the base to give continuity to the line in the event of removal of a detector, possibility to test loop wiring continuity.



Parameter	ED100		ED200	ED300
Power supply voltage	19-30 Vdc			
Standby current consumption	200 uA			
Alarm current consumption	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 (base included)	46 mm	54 mm		
Diameter	110 mm			
Weight (with base)	160 g			
Weight (without base)	90 g			



### 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. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m – 0.10 dB/m – 0.12 dB/m - 0.15dB/m).



### ED200 – Heat detector

The detector can be set in the following modes: A1R (fixed threshold at 58°C with thermovelocimetric detection), B (fixed threshold at 72°C), A2S (fixed threshold at 58°C), BR (fixed threshold at 72°C with thermovelocimetric

detection). As a result of its high flexibility, this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.



### ED300 – Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving inflammable

liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on the control panel by selecting from the following:



- **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. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- **SMOKE Mode:** the detector will operate as per the ED100.
- **HEAT Mode:** the detector will operate as per the ED200.

## Bases



### EB0010 – Detector mounting base

Detector base for 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

The base is equipped with a relay activated by the detector.



### 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. To be installed under the detector base, h 34mm.



### EB0040

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

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



### EB0050

EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



### EB0060

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

\* Not for EU market.

## 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 more

audible/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 input for the activation of the devices connected to the output
- 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)



### 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)
- 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)





## EU311 – Micromodule

The EU311 micromodule, due to its reduced-size, can be housed directly inside the enclosure of the device it controls (call point, sounder/flasher, 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 one audible/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)

	EM312SR	EM110	EM411R	EU311
Power supply voltage	19 – 30Vdc	19 – 30Vdc	19 – 30Vdc	19 – 30Vdc
Current draw during standby	80 µA	75 µA	1.2 mA	80 µA
Current draw during alarm	20 mA	20 mA	60 mA	20 mA
Height	53 mm	53 mm	53 mm	40 mm
Width	100 mm	100 mm	100 mm	54 mm
Depth (including terminals)	29 mm	29 mm	29 mm	15 mm
Weight	66 g	66 g	66 g	15 g

## EM322AC – Module with 2 inputs and 2 relay outputs @230Vac

The EM322AC module connects directly to the loop and is equipped with two supervised inputs (capable of controlling the status of external devices) and two relays capable of driving 230 Vac mains-voltage loads.

For each of the two output relays it is possible to enable a supervisory function that allows you to check whether there is voltage across the contact when the relay is in stand-by status.



- 2 supervised inputs
- 2 relay outputs @ 230 Vac with optional load supervision function
- Built-in short-circuit isolator
- LEDs to indicate the status of inputs, outputs and communication with the control panel
- Automatic addressing (each device is identified by a factory-assigned serial number)
- DIN rail mounting compatibility
- Power supply voltage: 19 ÷ 30Vdc
- Current draw during standby: 80µA
- Current draw during alarm: 10mA
- Dimensions: 113x71x43 mm
- Weight: 130g

## EM3xx – Multi Input/output module and conventional line interface

The module connects to the loop and provides different inputs and outputs depending on the model (see 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 are, depending on the model, supervised for the management of audible/visual signallers or dry contacts.



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 Presidia range

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

**EM500 module** – 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 (24Vdc).



## FBOX100 – IP65 plastic enclosure

IP65 plastic enclosure for housing loop module models EM312SR, EM110, EM411R, EM3xx, EM322AC.

- Dimensions 16x12x5 mm
- White casing



## Manual call points

### EC0011E – Outdoor manual call point (IP67)

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



### EC0020 – Manual call point

- Manual call point with resettable element operated by plastic key (included)
- Activation condition indicated by coloured flag and LED



## EM600 – HUSH BUTTON – Home mute button

The EM600 module ('Hush button') finds its ideal placement 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 apartment. By installing an EM600 button inside each apartment, in the event of a smoke alarm a voice message will warn only the occupants of the apartment in danger. In the event of a false alarm, generated for instance by cooking, the

occupants will have the possibility to silence the alarm, remove the cause and open a window for several minutes to ventilate the room. It is possible to silence an alarm three consecutive times after which the warning will be broadcast to the entire building. Clear and intuitive voice messages guide the building occupants throughout the various phases.



## Remote indicators

### IL0010 – Remote indicator

Remote fire-warning indicator





## Visual/Audible signalling devices

### ESS021\* – Audible/Visual sign

### ESS022\* – Audible-Visual alarm sign and flasher

Red alarm sign complete with EN54-3 certified audible signalling. Comes with 'Fire alarm' written on it, available with different indications on request. 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). ESS022 has EN54-23 approved flasher circuitry.



\* Refer to 'Accessories' section for available text.

	ESS021	ESS022
Sound output @ 1m	92 dB(A)	
Light output (EN54-23)	-	W 4.6 - 9.1
Flash frequency	-	1 Hz
Operating voltage	18 – 30 Vdc	
Consumption	21 mA	50 mA
Operating temperature	from -10°C to +55°C	
Dimensions	293 x 130 x 55 mm	

### ISB1011 – Non-addressable base with audible signalling

### ISB1021 – Non-addressable base with audible/visual signalling

### ISB1030 – Non-addressable base with audible signalling and voice functions

### ISB1050 – Non-addressable base with audible/visual signalling and voice functions

Base for Enea series detectors with audible/visual signaller, activated by the R output of the detector, IP21 protection grade. Depending on the model, it is possible to select the alarm tone from the 14 available as well as adjust volume and flasher intensity (in models with flasher components). 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 and, via the EDRV2000, customize tones and voice messages. The device is powered via the loop but is equipped with terminals for an optional separate power input.



	ISB1011 - ISB1021	ISB1030 - ISB1050
Tone	14 selectable via Dip switch	14 + 16 voice messages selectable via EDRV2000
Sound output @ 1m	MAX 98 dB	
Visual range (EN54-23)	High Power C-3-8 O-3.3-8 Low Power C-3-7 O-3-7	C-3-10 O-4-10 C-3-9 O-3.5-9
IP protection rating	IP21	
Operating voltage	18 – 30 Vdc	
Consumption	From 1.4 a 40mA (depending on the selected tone)	
Operating temperature	from -10°C to +55°C	
Weight	220 g	
Dimensions	112x112x53 mm	

### ESB1011 – Addressable base with audible signalling

### ESB1021 – Addressable base with audible/visual signalling

### ESB1030 – Addressable base with audible signalling and voice functions

### ESB1050 – Addressable base with audible/visual signalling and voice functions

Base for Enea series detectors with visual/audible alarm signaller, equipped with own address and capable of changing tone (or voice message, for versions with the voice function) in accordance with the situation, IP21 protection grade. Volume, flash intensity and sound sequences can be selected via the control panel from the 14 tones on-

board the device (and 16 voice messages available in 8 different languages, only for versions with the voice function). For models with the voice alarm function, it is also possible to customize tones/voice messages by means of the EDRV2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.



	ESB1011 - ESB1021	ESB1030 - ESB1050
Tone	14 selectable via Dip switch	14 + 16 voice messages selectable via EDRV2000
Sound output @ 1m	MAX 98 dB	
Visual range (EN54-23)	High Power C-3-10 O-4-10 Low Power C-3-9 O-3.5-9	C-3-10 O-4-10 C-3-9 O-3.5-9
IP protection rating	IP21	
Operating voltage	18 – 30 Vdc	
Consumption	From 1.4 a 40mA (depending on the selected tone)	
Operating temperature	from -10°C to +55°C	
Weight	220 g	
Dimensions	112x112x53 mm	

- ES1011** – Ceiling mount addressable audible signaller
- ES1021** – Ceiling mount addressable visual/audible alarm signaller
- ES1030** – Ceiling mount addressable alarm signaller with voice functions
- ES1050** – Ceiling mount addressable visual/audible alarm signaller with voice functions

Ceiling mount addressable visual/audible-alarm signaller, IP21 protection grade. Volume, flash intensity and sound sequences can be selected via the control panel from the 14 tones on-board the device (and 16 voice messages available in 8 different languages, only for versions with the

voice function). For models with the voice alarm function, it is also possible to customize tones/voice messages by means of the EDRV2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.



ES1011 - ES1021				ES1030 - ES1050	
Tone		14 selectable via Dip switch		14 + 16 voice messages selectable via EDRV2000	
Sound output @ 1m		MAX 98 dB			
Visual range (EN54-23)	High Power	C-3-8	O-3.3-8	C-3-10	O-4-10
	Low Power	C-3-7	O-3-7	C-3-9	O-3.5-9
IP protection rating		IP21			
Operating voltage		18 – 30 Vdc			
Consumption		From 1.4 a 40mA (depending on the selected tone)			
Operating temperature		from -10°C to +55°C			
Weight		175 g			
Dimensions		112x112x53 mm			

- ES2011RE** – Wall mount audible alarm signaller. Red
- ES2011WE** – Wall mount audible alarm signaller. White
- ES2021RE** – Wall mount visual/audible alarm signaller. Red
- ES2021WE** – Wall mount visual/audible alarm signaller. White
- ES2030RE** – Wall mount audible alarm signaller with voice alarm. Red
- ES2030WE** – Wall mount audible alarm signaller with voice alarm. White
- ES2050RE** – Wall mount visual/audible alarm signaller with voice alarm. Red
- ES2050WE** – Wall mount visual/audible alarm signaller with voice alarm. White

Wall mount addressable visual/audible-alarm signaller, IP65 protection grade. Volume, flash intensity and audio sequences selectable via the control panel (and diversified according to circumstances) choosing from the 14 tones (and 16 messages in 8 different languages for the versions with voice functions) available on board

the device. For models with the voice alarm function, it is also possible to customize tones/voice messages by means of the EDRV2000. The device is powered via the loop but is equipped with terminals for an optional separate power input.



ES2011 - ES2021				ES2030 - ES2050	
Tone		14 selectable via Dip switch		14 + 16 voice messages selectable via EDRV2000	
Sound output @ 1m		MAX 98 dB			
Visual range (EN54-23)	High Power	W-3.5-7	O-3.5-8-7	W-3.5-10.2	O-3.5-10.5-10.0
	Low Power	W-3-6.5	O-3-8-6.5	W-2.8-7	O-2.8-7.5-7
IP protection rating		IP65			
Operating voltage		18 – 30 Vdc			
Consumption		From 1.4 a 40mA (depending on the selected tone)			
Operating temperature		from -10°C to +55°C			
Weight		150 g			
Dimensions		121 x 121 x 57 mm			

### PLEXI\_ES2000\* – Signalling sign with placement for sounder installation

Transparent plexiglass panel with 'FIRE ALARM' warning (white wording on red background) and Inim Logo. The panel is supplied with assembling kit and template. Dimensions: 430 x 130 x 4mm.



\* Refer to 'Accessories' section for available text.

## EITK2000-ToolKit

Kit\* for manual addressing, configuration, maintenance and diagnostics of systems made up of Iris and Enea series devices



Front view  
of driver



EITK2000  
ToolKit

EITK2000 is a kit consisting of an EDRV2000 driver, the FireGenius-PRO software and a series of accessories for the connection and power supply.

The EDRV2000 driver, thanks to its ergonomic shape, allows you to perform with ease manual addressing operations on addressable-analogue devices from the Enea series, in the event that 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 through which it is possible to connect to fire alarm signalers from the Iris and Enea series and configure their operating parameters (select alarm tones/messages, volume, flasher power, etc.).

Through the driver and the FireGenius-PRO software, it is also possible to customize the tones/messages of the signalers by choosing from the large library available and composing tones to your liking or by starting from audio files.

The kit also allows you to take full advantage of the unique

features offered by the LoopMap and Versa ++ technologies integrated in the analogue-addressable detectors of the Enea series.

By connecting the EDRV2000 driver to the loop and interfacing it with a PC on which the FireGenius-PRO software is running, it is possible, thanks to the LoopMap technology, to reconstruct the loop wiring map.

The various connected devices are identifiable through their unique serial number and type. The FireGenius-PRO software is capable of reconstructing the wiring order along the cable and to recognize and trace any 'T' junctions that are present. The FireGenius-PRO software application presents the wiring in graphic form.

By clicking on the system elements, you will be able to establish the status (smoke level, contamination, etc.) and interact in real-time, for example, by activating LEDs or outputs.



Smoke and temperature graph on display



Loop configuration

\*The kit includes EDRV2000 and EITK-PWSP.

### ORDER CODES

<b>EITK2000</b>	Kit for the configuration, maintenance and diagnostics of systems based on Iris and Enea series devices. The kit includes EITK-DRV, EITK-BASE, EITK-PWSP.
<b>EDRV2000</b>	Driver for zones with Iris series devices or loops with Enea series devices.
<b>EITK-PWSP</b>	Power supply for the EITK-DRV driver.



# Vega

Analogue addressable detector series



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

**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 sophisticated algorithm implemented inside analyzes both the quantity of smoke detected in the chamber and the changes in

the ambient temperature perceived by the thermistor, guaranteeing a rapid and effective response even in the event of the start of a fire characterized by low visible smoke emission.

**Decor line**

V100, V200 and V350 detectors are also

available with décor line covers for aesthetically demanding environments.



## Modules



Wall mounting



Minimodule

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

ORDER CODES



**VMCZ100**

This device allows you to interface a line of conventional devices (detectors, call points, etc.) to the loop. Supplied in its own enclosure 130x95x60 with IP65 protection rating.



**VMIC404**

This device occupies 8 addresses. Supplied in its own enclosure 210x170x65 with IP65 protection rating.

## Call points

### ALCP100 – Addressable resettable call point

ALCP100 call points connect directly to the detection loops of addressable analogue control panels.

LPCB Cert. No. 998h



## Detector bases

The vast range of bases allows the detectors to adapt to all types of applications. ABS enclosures with heavy duty contacts ensure high performance and reliability through time.

### VB100 – Standard base for analogue addressable VEGA series detectors

### VDBS100 – Deep base for analogue addressable VEGA series detectors



## Visual/Audible signalling devices

### CWS100 – Conventional IP65 Sounder

### CWS100-AV – Conventional IP65 Sounder and Beacon

### ALWS-MOD – Intelligent sounder loop interface module



### IL0010 – Alarm Repeater

LED repeater that replicates the signal generated by a detector in alarm status.



## Accessories

### VPU100 – Driver

Configures the addresses of Argus series devices.



## 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 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.



Cert. No. 010g



### 55000-420

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

with status signalling LED and a remote output capable of supplying 17 mA maximum. Incorporated anti-removal device.



Cert. No. 010p



### 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 17mA maximum. Incorporated anti-removal device.



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



Cert. No. 010m



### 38531-771

Spare address card with plastic tag. In the part that protrudes it is possible to

indicate the detector number. To be requested in the case of change/loss.

### 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

17mA maximum. Operating voltage 14-28 Vdc (polarity-insensitive). Apollo Discovery protocol. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.



Cert. No. 010q



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 17mA maximum. Anti-removal device.



Cert. No. 010p



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



Cert. No. 010h



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.



Cert. No. 010q



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.



## Accessories

### 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.



### 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.



### 55000-845

Interface for analogue control panels capable of managing an absorption line for conventional detectors. The interface comes with enclosure

and terminal board. A red LED indicates interface alarm status. Complete with isolator.



### SA4700-102

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.



### 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. Polarity-insensitive. Complete with isolator.





**55100-908**

Analogue manual call point 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.

**45681-330**

Addressable sounder beacon base with isolator. Suitable for connection to the detection loop of a fire-detection panel. It 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. White enclosure. Supplementary power supply not required. 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. White enclosure. Supplementary power supply not required.

**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 control panels with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36



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). 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. 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 tranquility 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 front plate is simple and intuitive thanks to the graphic display. However, it is possible to configure the control panel from a PC via an RS232 serial connection, the simple and intuitive SmartLeague configuration software greatly speeds up the commissioning of the system. 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.

## Accessories

### SmartLine/8Z

8 zone expansion board equipped with an additional supervised output.



### SmartLetUSee/LCD-Lite

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



### 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 the SIA-IP communication protocol.



### SmartLetLoose/ONE

Fire extinction board for the management of a gas extinguishing channel. 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 memory of the events log that retains stored data even when the control panel is turned off.



### SmartLevel

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



## Main features

- Conventional fire-detection control panel
- Available with 2 zones, 4 zones expandable to 20, 4 zones expandable to 36
- Certified EN54-2 / EN54-4
- 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 signalling output
- 1 power supply output for ancillary devices
- 1 interruptible power supply output for ancillary devices
- 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)
- Signalling buzzer
- 8 Timers
- 8 logical equations
- Automatic balancing of individual detector lines
- 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 (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): 497x380x87 mm.
- Weight (without batteries) – SmartLine020: 3 Kg – SmartLine036-4: 6 Kg

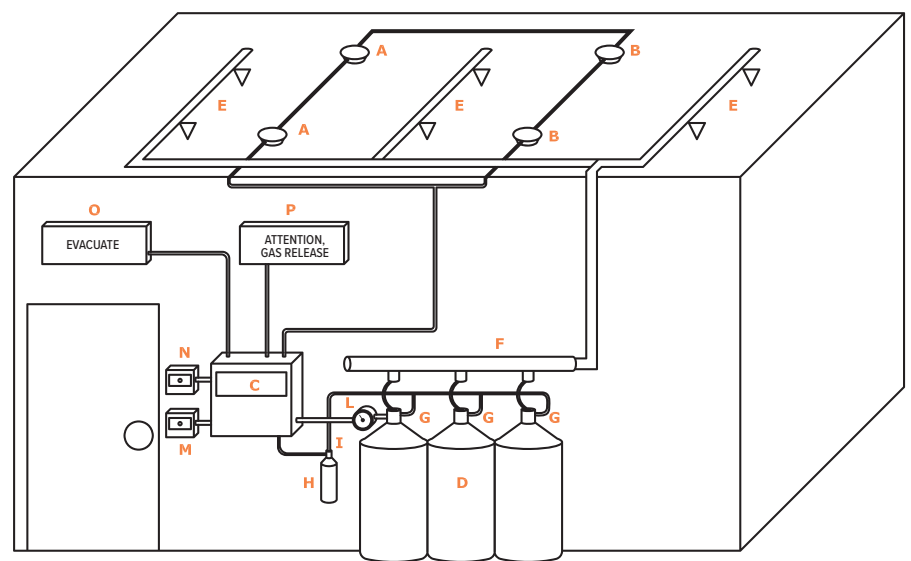
## Extinguishment

Addition of a SmartLetLoose/ONE fire extinction board to any SmartLine series fire control panel provides the system with GAS extinction control capabilities in compliance with EN12094-1. The control panel provides all the functions required by law and allows the connection of the various accessories necessary for the management of a fire extinction system (refer to

'Accessories 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).

### DIAGRAM KEY

- A** Line 1 detectors
- B** Line 2 detectors
- C** SmartLine fire extinction control panel
- D** Extinguishing gas cylinders.
- E** Gas release nozzles
- 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 extinction button
- O** Audio/Visual signaller of imminent gas release
- P** Audio/Visual signaller of gas present



Application diagram

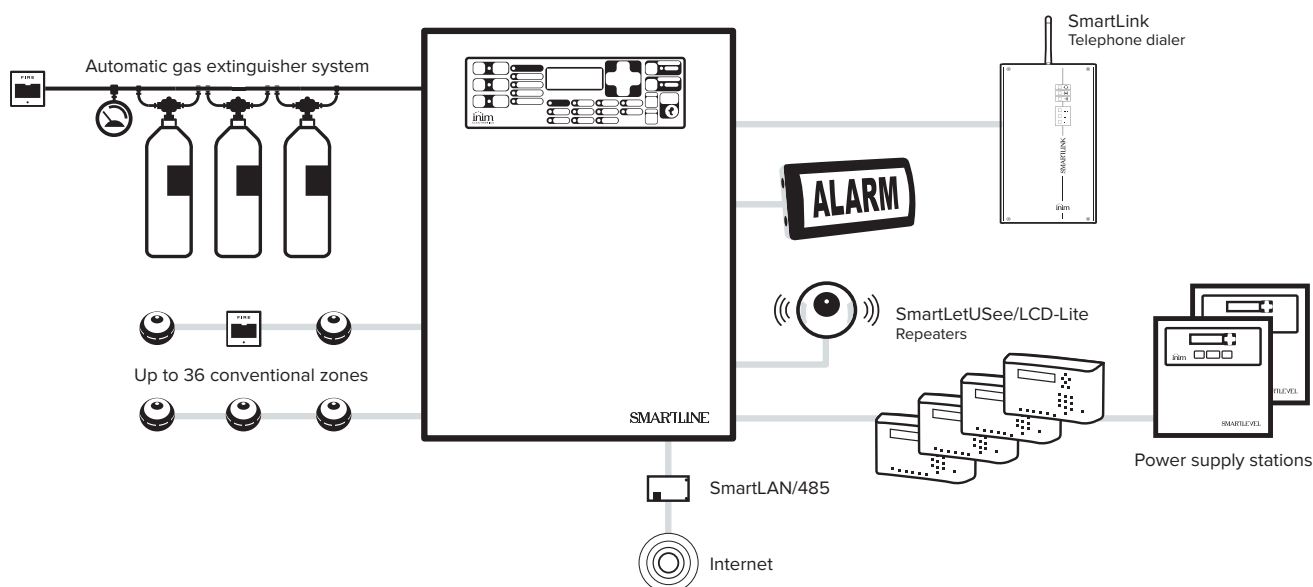
## Main features

- 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 activation of fire suppression devices
- Supervised output for activation of pre-extinction signallers
- Supervised output for activation of extinction-in-progress signallers

### ORDER CODES

<b>SmartLine020-2</b>	Non-expandable 2 zone conventional control panel.
<b>SmartLine020-4</b>	Conventional control panel with 4 zones expandable to 20.
<b>SmartLine036-4</b>	Conventional control panel with 4 zones expandable to 36.
<b>SmartLine/8Z</b>	8 zone expansion board
<b>SmartLAN/485</b>	Ethernet connection board
<b>SmartLetLoose/ONE</b>	Extinction board
<b>SmartLetUSee/LCD-Lite</b>	Remote-control repeater panel for SmartLine and SmartLight control panels.
<b>SmartLeague</b>	Programming and management software.
<b>Link232F9F9</b>	RS232 connection cable between PC and Inim devices.
<b>IPS24060G</b>	Power supply module 1.5A @ 27.6Vdc.
<b>IPS24160G</b>	Power supply module 4A @ 27.6Vdc.
<b>ProbeTH</b>	Thermal probe - protects the battery against overheating and consequent permanent damage.

## Application diagram



## SmartLeague programming software



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 configuration of 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.



## Iris

### Conventional detectors

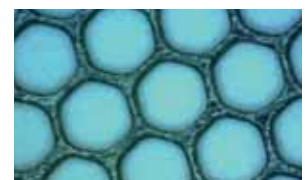


Iris series detectors maintain the ease-of-use of conventional detectors, yet are capable of providing a series of technical solutions that until today were provided by only the most sophisticated addressable analogue systems. As a result of advanced technologies based on new-generation microprocessors, these detectors implement a set of sophisticated algorithms capable of ensuring unequaled 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

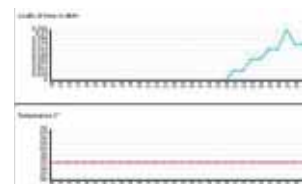
kit, to connect directly to the detector line for a complete diagnosis of each detector and thus test its operating capacity, verify its real-time values, view the contamination level in the optical smoke chamber and change its sensitivity and operating mode. Each detector has a non-volatile memory which 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. And, therefore, 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
- Bicolour LED: Red for alarm; green flash (optional) for stand-by 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
- Settable smoke and heat detection sensitivity (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 driver)
- Memory of the smoke and temperature readings 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



### 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. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m – 0.10 dB/m – 0.12 dB/m - 0.15dB/m).



### ID200 – Heat detector

The detector is supplied in AIR mode (fixed threshold at 58°C and rate of rise detection), however it can be set (via the EDRV1000 driver) in mode: B (Fixed threshold at 72°C), A2S (Fixed threshold at 58°C), BR (Fixed threshold at 72°C

with rate of rise detection). As a result of its high flexibility, this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.



### ID300 – Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving

inflammable liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on site (by means of the EDRV100 driver) by selecting from the following:



- **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. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- **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.

# CONVENTIONAL DETECTION IRIS

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

Parameter	ID100	ID200	ID300
Power supply voltage	10-30 Vdc		
Standby current consumption	90 uA	70 uA	90 uA
Alarm current consumption	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) AND – OR – PLUS Mode
Operating temperature	-5°C + 40°C		
Height (base included)	46 mm	54 mm	
Diameter	110 mm		
Weight (with base)	160 g		
Weight (without base)	90 g		

## Bases



**EB0010 – Detector mounting base**  
Detector base for 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**  
The base is equipped with a relay activated by the detector.



**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. To be installed under the detector base, h 34mm.



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



**EB0050**  
EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



**EB0060**  
Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

## Manual call points

### IC0020 – Manual call point

- Manual call point with resettable element operated by plastic key (included)
- Activation condition indicated by coloured band and LED
- Selectable alarm resistor

WCP0020 optional accessories (transparent screen for IC0020 buttons protects against accidental activation) and FCP0020 (flange for flush mounting the IC0020 button; fits UK Single Gang boxes). DBCP0020 – Deep box for external pipe fitting (base h = 33mm; base h + call point h = 57mm).



### IC0011E – Outdoor manual call point (IP67)

Manual call point with resettable element. Waterproof to IP67, suitable for outdoor installation.

## Remote indicators

### IL0010 – Remote indicator

Remote fire-warning indicator



## EITK2000-ToolKit

Kit\* for manual addressing, configuration, maintenance and diagnostics of systems made up of Iris and Enea series devices



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 nonvolatile 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.



Smoke and temperature graph on display



EITK2000  
ToolKit

\*The kit includes EDRV2000 and EITK-PWSP.

### ORDER CODES

<b>EITK2000</b>	Kit for the configuration, maintenance and diagnostics of systems based on Iris and Enea series devices. The kit includes EITK-DRV, EITK-BASE, EITK-PWSP.
<b>EDRV2000</b>	Driver for zones with Iris series devices or loops with Enea series devices.
<b>EITK-PWSP</b>	Power supply for the EITK-DRV driver.

## F-COM



Universal telephone communicator for fire detection systems

As required by the reference legislation, all unmanned fire detection and alarm systems (IRAI) must be equipped with a remote communicator CERTIFIED EN54-21. The F-COM universal communicator, thanks to its flexibility and configuration simplicity, is capable of sending voice calls in response to the activation of its input lines (it includes a memory for voice messages configurable via audio recorder or text-to-speech converter), as well as 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 simple to use, effective and adapts to any control panel of any brand and model. F-COM is capable of remotely transmitting any type of alarm condition, fault and is freely configurable via hardwired Telephone line, GSM Line or 3G data line.

The communicator has its own internal EN54-4 certified power supply, houses two 12V 1.2Ah batteries (not supplied).



### Main features

- Universal communicator
- Certified EN54-21 and EN54-4
- Certified IMQ
- Hardwired telephone line, GSM line, 3G data line
- Voice and digital calls, SMS texting
- Fire Alarm call activation input
- Fault call activation input
- Received call confirmation output
- Fault signalling output
- N° 1 configurable output terminal
- 3 configurable input/output channels
- All input/output terminals fully configurable (polarity, balancing, programmable thresholds)
- Activation of calls in response to internal conditions (20 different configurable conditions)
- Phonebook with 32 contact spaces
- 32 configurable SMS messages
- 100 configurable voice messages (audio files, recorder, text-to-speech)
- Internal events memory
- Graphic LCD screen
- EN54-4 certified internal power supply
- Fully configurable from the front panel or via the F-COM/STUDIO configuration software

## F-COM/STUDIO

The 'F-COM/STUDIO' PC software can be obtained free of charge from the Inim 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 telephone 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 made possible by the protocol translator that connects to and feeds directly from the loop and allows the control

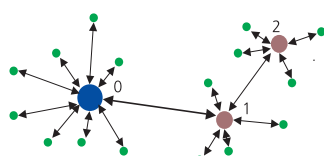
panel to communicate with up to 32 wireless devices. The applied wireless technology uses up-to-the-minute electronic components and a protocol resulting from intense research and development to guarantee maximum reliability, response speed and an optimized battery life on devices. The range of wireless devices available includes Optical smoke detectors, Temperature detectors, Multicriteria detectors, Call points, Input modules and 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
- Cost effective: simplified installation and increased duration in the absence of maintenance.
- 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, call points 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 call point

SGMI200 – Wireless input module

SGMCB200 – Wireless Output Module - 2 outputs

CWS100 – Conventional IP65 Sounder

CWS100-AV – Conventional IP65 Sounder and Beacon

SGWS-MOD – Wireless sounder interface module

SGFI100 – Wireless Alarm Repeater - Addressable

## 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.



Linear beam detector



Control unit



Mounting plate



Prism reflector



Swivel mounting bracket



Anti-condensation 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. These operations can be controlled from ground level by means of the controller unit. The system includes a motorized head containing an infrared transceiver, a ground level controller and reflectors. Eventual smoke contamination is revealed by the returned infrared beam analysis. This detection method allows the system to detect fire in its early stages. Adjustments can be made from ground level by means of the controller unit. The standard system covers a range of 5 to 70 meters, however, a range-expander kit is available: a 70 to 140 meters kit which uses 4 reflectors.

**Commission:** the beam alignment phase is an extremely simple procedure. This is due to the fact that 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. The

contamination level of the lenses can be viewed on the LCD screen. The lenses should be cleaned when necessary. 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.

**Turn on and off:** the beam detector can be switched off from the control panel. Should you forget to turn it back on, it will resume normal operation after 8 hours.

**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-condensation 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
Protection 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	Adjustable between 25% and 50%
Operating voltage	10.2 / 30 V

Stand-by current draw	3mA
Current draw during alarm status	3mA
Alarm latching	Optional
Fault relay	1A @ 30 V
Alarm relay	1A @ 30 V
Dimensions (WxHxD)	155x180x125 mm
Weight	Detector: 1 Kg - Controller: 0.5 Kg

### ORDER CODES

<b>BDH110</b>	5m-70m reflective optical beam detector. Includes: a detection unit, a control unit, a reflector unit.
<b>BDHADAPT</b>	Mounting plate for beam head or single reflector.
<b>70KIT 140</b>	Range extension kit up to 140m.
<b>140KIT 160</b>	Range extension kit up to 160m.
<b>FB-BRACKET</b>	Swivel plate for prism reflector.
<b>FOGKIT</b>	Anti-fogging kit for BDH100 linear detector.
<b>FOGREF</b>	Reflector for the FOGKIT anti-fogging kit for the BDH100 linear detector.

## Adapters for duct applications

### Housing for duct sampling smoke detector

In places where air ducts are present, their proper monitoring is necessary for an installation that meets requirements. International standards and codes acknowledge that air conduction systems can transfer smoke, toxic gases or flames from one area to another thus multiplying the risk of accidents, panic and damage to property. One of the main aims of duct-

smoke detection is to minimize the propagation of smoke through recirculation, to achieve this an efficient detection system is essential that allows an immediate reaction by blocking fans and closing shutters. Inim offers everything necessary for this type of need.



EBDDHN



DDHBRKTN



DDHCOVERN

#### EBDDHN – Universal adapter 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 pipe 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 adapter 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 EBDDHN.

#### DDHCOVERN – Waterproof cover

This cover is required when the EBDDHN 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

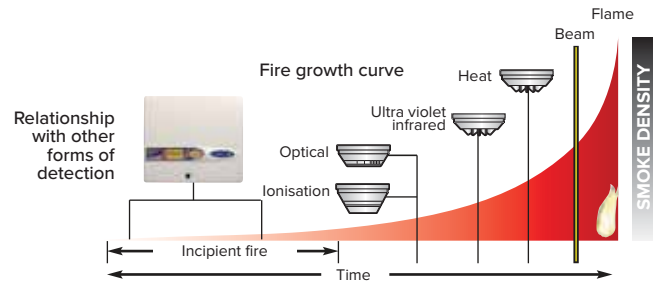
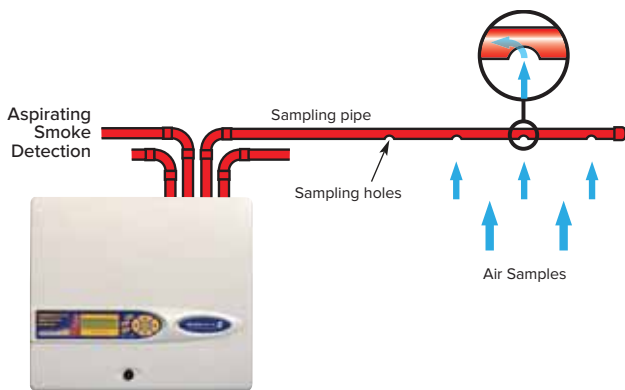
#### Technical features

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 adapter.
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 N	Anti-dust filter.

## Smoke aspirating system



Stratos aspirating systems are capable of controlling sections of sampling pipe with sections varying from 50 meters to 100 mt. depending on the model and the required level of sensitivity. Stratos aspirating systems provide the very earliest warning of smoke. The apparatus comprises a sampling chamber (protected by a disposable filter) and a 3D laser sensor. This particularity, besides guaranteeing effective and timely detection, discriminates effectively between dust particles and aerosols generated by combustion. These features allow very high sensitivity suitable for the protection of particularly delicate sites without incurring false alarms. 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 easily in systems where multipoint and linear detectors are scarce. There are environments in which the aspirating system allows a more rapid detection (ced-electrical cabinets-etc.). In order to meet these needs, STRATOS has a series of devices designed to facilitate site safety. 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 installation of Stratos systems in particularly dusty environments is extremely advantageous, in fact, thanks to the interchangeable 'filter cartridges' the detection system is always effective and well maintained and the cost of labour greatly reduced. With Stratos devices it is possible to create systems with different sensitivity and intervention thresholds simply by making more or fewer sampling holes in the same portion of the sampling pipe. Such high-sensitivity coupled with advanced processing allow Stratos to be employed even in the most demanding applications. It is supplied complete with 'PipeCAD' software which allows the design and testing of the aspiration system.

### 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 'Classfire' algorithm implemented inside is capable of automatically optimizing the sensitiv-

ity 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.



## Features

- Power supply voltage: 21.6V – 26.4Vdc
- Consumption: 250mA @ 24Vdc
- 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: 50mt
- Sampling pipe diameter: 3/4" (27 mm)
- Maximum number of sampling holes: 10
- Detection levels: Alarm, Early warning
- On-board relays: Early warning, Alarm, Fault
- Protection 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 Technology LDD 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.



## Features

- Power supply voltage: 21.6V - 26.4Vdc
- Consumption: 250mA @ 24Vdc
- Dimensions: 140W x 200H x 85D
- Weight: 1.7 Kg
- Operating temperature: -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: 25mt
- Maximum sampling pipe length in a static-air environment: 50mt
- Sampling pipe diameter: 3/4" (27 mm 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
- Protection 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 100mt. Supplied complete with PIPECAD software.



## Features

- Power supply voltage: 21.6V - 26.4Vdc
- Consumption: 400mA @ 24Vdc
- Dimensions: 300W x 220H x 85D
- Weight: 3.8kg
- Operating temperature: -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" (27 mm 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
- Protection rating: IP50

## Stratos HSSD2

Stratos HSSD is capable of drawing air from the protected area through four sampling pipes of up to 100mt each, for a maximum total length of 200mt.

It is equipped with keypad and display and provides information regarding system operating status and eventual alarm conditions. Supplied complete with PIPECAD software.



Cert. No. 1199d

## Features

- Power supply voltage: 21.6V - 26.4Vdc
- Consumption: 450mA @ 24Vdc (aspiration velocity=8)
- Dimensions: 427W x 372H x 95D
- Weight: 5.2 Kg
- Operating temperature: -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: 100mt
- Maximum total pipe length: 200mt @ 80 holes 200 mt @ 100 holes
- Sampling pipe diameter: 3/4" (27 mm 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
- Protection rating: IP50

## ORDER CODES

IN30725	Aspirating system Micra 10.
IN30621	Aspirating system HSSD 2.
IN30671	Aspirating system Micra 25.
IN30672	Aspirating system Micra 100.
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)
- CM 10954 – Pipe Support (replace CM10930)
- CM 10960 – Labels for holes location (100 pcs)



## Flame detectors



### Technical features

Supply voltage	14-30 Vdc
Consumption	MAX 30 mA
Protection rating	IP65
Sensitivity class	1 according to EN54-10
Output signals	Alarm relay, Fault relay

### IR<sup>2</sup> Flame detector

Dual-infrared flame detector, designed to protect areas where open fires may be expected.

**016581 – IR<sup>2</sup> Flame Detector**

**016571 – IR<sup>2</sup> Flame Detector Intrinsically Safe**

**016511 – IR<sup>2</sup> Flame Detector in explosion-proof enclosure**

### IR<sup>3</sup> Flame detector

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

**016589 – IR<sup>3</sup> Flame Detector**

**016579 – IR<sup>3</sup> Flame Detector Intrinsically Safe**

**016519 – IR<sup>3</sup> Flame Detector in explosion-proof enclosure**

### UV/IR<sup>2</sup> Flame detector

Ultra Violet, dual infrared flame detector, designed to protect areas where open fires are to be expected.  
Suitable for outdoor area protection. Hi false alarm rejection.

**016591 – UV/IR<sup>2</sup> Flame Detector**

**016521 – UV/IR<sup>2</sup> Flame Detector in explosion-proof enclosure**

## Mounting Brackets

**007127 – Swivel mounting bracket**

**012545 – Steel cover for flame detectors**

**007279 – Steel cover for flame detectors in explosion-proof casing**



## 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). The use of linear heat detectors is provided for in the reference legislation. 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 jacket. 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	UL, 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 external Fluoropolymer coating. Good resistance to common chemicals, acids, solvents and abrasion.

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	UL, FM
XCR280	138°C	-40 ÷ +93°C	UL, FM
XCR356	180°C	-40 ÷ +121°C	UL, FM



## Industrial series gas detectors

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 of

leak detectors, all available in explosion-proof or dust-proof 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

- Thresholds configurable in L.I.E. or P.P.M percentage (%) or percentage of the volume (for oxygen detector only) depending on the gas to be detected
- 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 dust-proof metal enclosure. The sensitive element is located on the underside of the enclosure and is protected by a 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 explosion-proof enclosure

II 2G Ex d IIC T6 ATEX certified detector in explosion-proof 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 explosion-proof housing with LCD touch screen

Detector in explosion-proof enclosure like the INE7 series detectors with the addition of an LCD display touch screen, thanks to which calibration, verification and maintenance

operations can be performed without opening the enclosure. Thanks to this feature, it is also possible to operate in environments classified as safe.



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
LCD display touch screen	T
Hyphen	-
Type of interface (see table 3)	ii

# GAS DETECTION INDUSTRIAL SERIES



Table 1

Code nn	Gas detected	Pre-set Pre-alarm/Alarm thresholds	Range
00	Methane (CH <sub>4</sub> )	15/30 % L.I.E.	0 - 100% L.I.E.
01C/01P	hazard gases (see Order Code Table)	15/30 % L.I.E.	0 - 100% L.I.E.
01H	Nitrogen dioxide (NO <sub>2</sub> )	5 / 10 ppm	0 - 20 ppm
01IR	Carbon dioxide (CO <sub>2</sub> ) / Butane (C <sub>4</sub> H <sub>10</sub> )	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 (H <sub>2</sub> )	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 (NH <sub>3</sub> )	100 / 200 ppm	0 - 500 ppm
08	Ammonia (NH <sub>3</sub> )	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 and Fault signalling. One detector only per line)
AS-M	Connection for addressable Input module – Inim model EM312SR
42	4-20 mA output
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
GPL	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
GPL	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
Hazard 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
GPL	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
Hazard 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
GPL	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
Hazard 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
GPL	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


\*Hazard gases list (verify if available).

Methanol (methyl alcohol), Pentane, Heptane, Ethyl acetate, Ethylene, Ethanol (Ethyl alcohol), Butane, Exane, iso-Butane.


# GAS DETECTION INDUSTRIAL SERIES




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 panel terminals	Direct connection to Inim Loops	For MODBUS connection	
Methane	INE700P-42	INE700P-RL	INE700P-AS-M	INE700P-AS-C	INE700P-LE	INE700P-MB	INRE-700P
Hazard gases*	INE701P-42	INE701P-RL	INE701P-AS-M	INE701P-AS-C	INE701P-LE	INE701P-MB	INRE-701P
Petrol fumes	INE702P-42	INE702P-RL	INE702P-AS-M	INE702P-AS-C	INE702P-LE	INE702P-MB	INRE-702P
Hydrogen	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
Propane	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 touch screen 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 panel terminals	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
Hazard gases*	INE701PT-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
GPL	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


\*Hazard 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

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	INE701H-42	INE701H-RL	INE701H-AS-M	INE701H-AS-C	INE701H-LE	INRE-701H-MB	INRE-701H
Carbon monoxide	INE703H-42	INE703H-RL	INE703H-AS-M	INE703H-AS-C	INE703H-LE	INRE-703H-MB	INRE-703H
Ammonia (500 ppm)	INE707H-42	INE707H-RL	INE707H-AS-M	INE707H-AS-C	INE707H-LE	INRE-707H-MB	INRE-707H
Ammonia (2000 ppm)	INE708H-42	INE708H-RL	INE708H-AS-M	INE708H-AS-C	INE708H-LE	INRE-708H-MB	INRE-708H
Oxygen (Excess)	INE710H-42	INE710H-RL	INE710H-AS-M	INE710H-AS-C	INE710H-LE	INRE-710H-MB	INRE-710H
Oxygen (Defect)	INE711H-42	INE711H-RL	INE711H-AS-M	INE711H-AS-C	INE711H-LE	INRE-711H-MB	INRE-711H


Detectors with Electrochemical Cell type sensitive element  
In ATEX enclosure with LCD touch screen 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 panel terminals	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
GPL	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
GPL	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

\*\*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 INDUSTRIAL SERIES



Detectors with infrared sensitive element in ATEX enclosure  
with LCD touch screen 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
GPL	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)

## Technical features

Supply voltage	11 – 30 Vdc	
Standby current consumption	Semiconductor sensors	50 mA
	Catalytic sensors	70 mA
	Electrochemical sensors	30 mA
Alarm current consumption	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	

## Accessories

### 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 – Stainless steel mounting bracket for ATEX standard detectors (without display)

### INA55-110 – Valve with Flowmeter

Disposable canisters	Gas
INB55-100	Propane 20% L.I.E., suitable for LPG detectors also
INB55-101	Propane 40% L.I.E., suitable for LPG detectors also
INB55-102	Methane 20% L.I.E.
INB55-103	Methane 40% L.I.E.
INB55-104	Hydrogen 20% L.I.E.
INB55-105	Hydrogen 40% L.I.E.
INB55-106	Acetylene 20% L.I.E.
INB55-107	Acetylene 40% L.I.E.
INB55-108	Carbon monoxide, 100 ppm
INB55-109	Carbon monoxide, 200 ppm
INB55-110	Oxygen 27% Volume
INB55-111	Isobutane 20% L.I.E., suitable for petrol fumes detectors also
INB55-112	Isobutane 40% L.I.E., 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 explosion-proof 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 4-20mA		4-20mA output		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	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 mon-oxide	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	SE138EO			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 connectable as 4-20mA to I/O terminals of SmartLine.

# GAS DETECTION ELITE SERIES



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	SE237EHCN	SE138EHCN	TS282EHCN		0 - 10 ppm	ZSEHCN		BO479	2
Hydrochloric Acid	ELECTROCHEMICAL	SE237EHCL	SE138EHCL	TS282EHCL	TS293EHCL	0 - 30 ppm	ZSEHCL	ZSEHCL/EX	WR000	2
Hazard gases (by request)	CATALYTIC**	SE237KX	SE138KX			0 - 20% LIE			BO200	5
	PELLISTOR**	SE237PX	SE138PX	TS282PX	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, Isopropolic alcohol, Ammonia, Heptane, Hexane, Ethanol (Ethyl alcohol).

\*\*\*Acetone, Tertiary Butyl alcohol, Butyl alcohol-n, Isobutyl alcohol, Isopropolic alcohol (2-Propanol), Prolipic alcohol (1-Propanol), Ammonia, Petrol (green), Butane, Butene-2-trans, Butene-1, Butene-2cis (Butene-2), Cyclohexane, Decan, Heptane, Hexane, Ethane, Ethanol (Ethyl alcohol), Ethylene, Hydrogen, Iso-butane, Iso-pentane, Methane, Methyl ethyl ketone (Butanone), Nitromethane, Nonane, Carbon monoxide, Octane-n.

## Accessories



**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** – S-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. With 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 signaling devices

Sounders, bells, flashers and fire 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.

**IS2011RE** – Wall mount audible alarm signaller with low power consumption. Red

**IS2011WE** – Wall mount audible alarm signaller with low power consumption. White

Audible alarm signaller, operates at 20 to 30 Vdc, IP65 protection grade.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available and volume adjustment.



<b>Tone</b>	14 selectable via DIP SWITCH
<b>Sound output @ 1m</b>	MAX 101 dB
<b>IP protection rating</b>	IP65
<b>Operating voltage</b>	20 – 30 Vdc

<b>Consumption</b>	From 1.4 a 5mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	150 g
<b>Dimensions</b>	121 x 121 x 57 mm

**IS2021RE** – Wall mount visual/audible alarm signaller with low power consumption. Red

**IS2021WE** – Wall mount visual/audible alarm signaller with low power consumption. White

Visual/Audible alarm signaller, operates at 20 to 30 Vdc, IP65 protection grade.

The DIP SWITCH allows selection of the alarm

tone from the 14 tones available as well as volume and flasher intensity adjustment.



<b>Tone</b>	14 selectable via DIP SWITCH	
<b>Sound output @ 1m</b>	MAX 101 dB	
<b>Visual range (EN54-23)</b>	High Power	W-3.5-7, O-3.5-8-7
	Low Power	W-3-6.5, O-3-8-6.5
<b>IP protection rating</b>	IP65	

<b>Operating voltage</b>	20 – 30 Vdc
<b>Consumption</b>	From 1.4 a 23 mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	150 g
<b>Dimensions</b>	121 x 121 x 57 mm

**IS2030RE** – Wall mount audible alarm signaller with voice alarm. Red

**IS2030WE** – Wall mount audible alarm signaller with voice alarm. White

Audible alarm signaller with voice functions, operate at 18 to 30 Vdc, IP65 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages from the 14 tones and 16 voice

messages available in 8 different languages on-board the device as well as volume adjustment. The EDRV2000 also provides for the customization of tones and voice messages.



<b>Tone</b>	14 + 16 voice messages selectable via EDRV2000
<b>Sound output @ 1m</b>	MAX 101 dB
<b>IP protection rating</b>	IP65
<b>Operating voltage</b>	18 – 30 Vdc

<b>Consumption</b>	From 10 a 40mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	150 g
<b>Dimensions</b>	121 x 121 x 57 mm

## IS2050RE – Visual/Audible signaller with voice alarm. Red

## IS2050WE – Visual/Audible signaller with voice alarm. White

Visual/Audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP65 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages from the 14 tones

and 16 voice messages available in 8 different languages on-board the device, as well as volume and flasher intensity adjustment. The EDRV2000 also provides for the customization of tones and voice messages.



<b>Tone</b>	14 + 16 voice messages selectable via EDRV2000		
<b>Sound output @ 1m</b>	MAX 101 dB		
<b>Visual range (EN54-23)</b>	High Power	W-3.5-10.2, O-3.5-10.5-10.0	
	Low Power	W-2.8-7, O-2.8-7.5-7	
<b>IP protection rating</b>	IP65		

<b>Operating voltage</b>	18 – 30 Vdc
<b>Consumption</b>	From 10 a 40mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	150 g
<b>Dimensions</b>	121 x 121 x 57 mm

## PLEXI\_ES2000\* – Signalling sign with placement for sounder installation

Transparent plexiglass panel with 'FIRE ALARM' warning (white wording on red background) and Inim Logo. The panel is supplied with

assembling kit and template. Dimensions: 430 x 130 x 4mm.



\* Refer to 'Accessories' section for available text.

## IS1011 – Ceiling mount audible alarm signaller with low-consumption

Ceiling mount audible alarm signaller, operates at 20 to 30 Vdc, IP21 protection rating.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available and volume adjustment.



<b>Tone</b>	14 selectable via DIP SWITCH		
<b>Sound output @ 1m</b>	MAX 98 dB		
<b>IP protection rating</b>	IP21		
<b>Operating voltage</b>	18 – 30 Vdc		

<b>Consumption</b>	From 1.4 a 5mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	155 g
<b>Dimensions</b>	112 x 112 x 37 mm

## IS1021 – Ceiling mount visual/audible alarm signaller, with low power consumption

Ceiling mount visual/audible alarm signaller, operates at 20 to 30 Vdc, IP21 protection grade.

The DIP SWITCH allows selection of the alarm tone from the 14 tones available, adjustment of the volume and the flasher intensity.



<b>Tone</b>	14 + 16 voice messages selectable via EDRV2000		
<b>Sound output @ 1m</b>	MAX 98 dB		
<b>Visual range (EN54-23)</b>	High Power	C-3-8	O-3.3-8
	Low Power	C-3-7	O-3-7
<b>IP protection rating</b>	IP21		

<b>Operating voltage</b>	20 – 30 Vdc
<b>Consumption</b>	From 1.4 a 23 mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	175 g
<b>Dimensions</b>	112 x 112 x 37 mm

## IS1030 – Audible alarm signaller with voice alarm

Ceiling mount audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP21 protection grade. The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm

messages from the 14 tones and 16 voice messages available in 8 different languages on-board the device as well as volume adjustment. The EDRV2000 also provides for the customization of tones and voice messages.



<b>Tone</b>	14 + 16 voice messages selectable via EDRV2000		
<b>Sound output @ 1m</b>	MAX 98 dB		
<b>IP protection rating</b>	IP21		
<b>Operating voltage</b>	18 – 30 Vdc		

<b>Consumption</b>	From 10 a 25 mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	155 g
<b>Dimensions</b>	112 x 112 x 37 mm



## IS1050 – Visual/Audible alarm signaller with voice alarm

Ceiling mount visual/audible alarm signaller with voice functions, operates at 18 to 30 Vdc, IP21 protection grade.

The EDRV2000 manual programmer allows selection of the alarm tone or voice alarm messages from the 14 tones and 16 voice

messages available in 8 different languages on-board the device, as well as volume and flasher intensity adjustment.

The EDRV2000 also provides for the customization of tones and voice messages.



<b>Tone</b>	14 + 16 voice messages selectable via EDRV2000		
<b>Sound output @ 1m</b>	MAX 98 dB		
<b>Visual range (EN54-23)</b>	High Power	C-3-10	O-4-10
	Low Power	C-3-9	O-3,5-9
<b>IP protection rating</b>	IP21		

<b>Operating voltage</b>	18 – 30 Vdc
<b>Consumption</b>	From 10 a 40mA (depending on the selected tone)
<b>Operating temperature</b>	from -10°C to +55°C
<b>Weight</b>	175 g
<b>Dimensions</b>	112 x 112 x 37 mm

## IS0010RE – Audible alarm signaller. Red

## IS0010WE – Audible alarm signaller. White

## IS0010RES – Audible alarm signaller with low-profile base. Red

## IS0010WES – Audible alarm signaller with low-profile base. White

Audible alarm signaller, operates at 17 to 60 Vdc, IP65 protection grade (IP21 for low-profile base version) complete with mounting base. Tone

selectable from the 32 available via Dip-Switch, volume adjusted by the internal trimmer.



<b>Tone</b>	32 tones selectable by means of a DIP Switch
<b>Sound output @ 1m</b>	106 dB(A) adjustable to 86 dB(A) (depending on the selected tone)
<b>IP protection rating</b>	IP65 (IP21 for the low-profile base)
<b>Operating voltage</b>	17 – 60 Vdc
<b>Current consumption – audible section</b>	From 4 to 41 mA (depending on tone)

<b>Current consumption – optical section</b>	5 mA
<b>Operating temperature</b>	-25 - +70°C
<b>Wire Entry</b>	2X2 mm on the base
<b>Weight</b>	250 g
<b>Dimensions</b>	Ø 98 mm h 104 mm (h 80 mm with low-profile base)

## 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.

Visual/Audible alarm signaller approved according new EN54-23 standard, IP65 protection grade (deep base version only), operating voltage from 17 to 60 Vdc, complete

with mounting base. Tone selectable from the 32 available by means of DIP switch, flash frequency 0.5Hz / 1Hz (selectable by means of DIP SWITCH), volume selectable from 2 levels.



<b>Operating voltage</b>	From 17 to 60 Vdc	
<b>Sound output @ 1m</b>	97 dB(A)	
<b>Tones</b>	32 selectable via DIP Switch	
<b>Consumption</b>	17 – 60 Vdc	
<b>Coverage pattern according to EN54-23</b>	W-3,1-11,3	C-3-15

# VISUAL / AUDIBLE SIGNALLING DEVICES

## IS0030RE – High power sounder

These audible signalling devices operate at 10 to 60 Vdc. IP66 protection rating. Complete with mounting base. They provide 32 tones configured

by means of a DIP SWITCH. The volume is easily adjusted using the internal trimmer.



<b>Tone</b>	64 tones selectable by means of a DIP Switch	<b>Current consumption – audible section</b>	Up to a 550 mA (depending on the selected tone)
<b>Sound output @ 1m</b>	120 dB(A) configurable	<b>Operating temperature</b>	-25°C - +70°C
<b>IP protection rating</b>	IP66	<b>Weight</b>	1.8 kg
<b>Operating voltage</b>	10 – 60 Vdc	<b>Dimensions</b>	166 x 150 mm

## ISC010 – 6” bell

## ISC010E – 6” bell for outdoor use

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



<b>Sound output @ 1m</b>		95 dB(A)	<b>Consumption</b>	20 mA
<b>IP protection rating</b>	ISC010	IP21	<b>Operating temperature</b>	-10°C - +55°C
	ISC010E	IP33C	<b>Weight</b>	920 g
<b>Consumption</b>		20 mA	<b>Dimensions</b>	160 x 64 mm

## ISS022\* – Audible/Visual sign with flasher

## ISS021\* – Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling.  
ISS022 has an EN54-23 certified optical signalling.

Comes with 'Fire alarm' written on it, available with different indications on request.



	ISS022	ISS021
<b>Sound output @ 1 m</b>	92 dB(A)	
<b>Light output</b>	EN54-23 W 4,6 - 9,1	/
<b>Flash frequency</b>	1 Hz	/
<b>Operating voltage</b>	11 – 30 Vdc	18 – 30 Vdc
<b>Consumption</b>	50 mA	21mA (media)
<b>Dimensions (w x h x d)</b>	293 x 130 x 75 cm	
<b>Operating temperature</b>	from -10°C to +55°C	



\* Refer to 'Accessories' section for available text.

## Ivy\*

### Self-powered sounder/flasher for outdoor installation

Ivy self-powered outdoor sounders for outdoor installation are especially designed for easy installation and programming. The plastic lid rotates on a horizontal axis with respect to the base and remains integral with it, leaving the installer free from the task of removing the lid which, on the contrary, offers a convenient work niche. Below the plastic cover is a solid metal undercover which contributes to making the structure extremely resistant.

The high intensity luminous signaller is obtained by means of high efficiency LEDs with reduced power consumption for longer autonomy.

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

Operating voltage	24 Vdc
Sound output (@ 24 Vdc - 3m)	MAX 103 dB (A)
Protection 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. No compromise with Inim's Smarty Italian quality at the best price. The Smarty is fully microprocessor-controlled to ensure excellence in performance. Uses piezoelectric sounder and super bright LED-technology flasher. A direct

move towards superior signalling features and low power consumption.

- Piezoelectric sounder
- Super bright LED technology flasher



#### Technical features

Supply voltage	24 Vdc
Current consumption	MAX 50 mA
Sound output (@ 24 Vdc - 1m)	MAX 105 dB (A)
Light Intensity (1m)	25 lux
Protection rating	IP31
Operating temperature	0 / 50 °C
Dimensions (HxWxD)	75 x 112 x 30 mm
Weight	110 g

\* Not for EU market.

#### ORDER CODES

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

## Harper

### Emergency-lighting and signalling lamps



Inim series emergency-lighting and signalling lamps are designed for direct connection to the detection Loop\* 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 Inim emergency lamps 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 lamps is further enhanced by new LiFePO<sub>4</sub> long-life batteries which are smaller and more environment-friendly than standard nickel-cadmium or nickel-metal hydride batteries.

## Our selection

The vast product lineup of the Harper range provides for every installation and system requirement. The various levels of autonomy and the different IP protection grades meet the needs of every environment whilst the flexibility of the accessories

permit every type of installation. For further details and the complete list of items relating to lighting and emergency signaling, please consult the dedicated catalogue.

\* The Inim lamps use the connection with the loop for data exchange only and not for their power supply, therefore, in addition to the connection to the loop a connection to the electrical network is required for each lamp.



## 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 hours
	02	2 hours
	03	3 hours
	04	4 hours
	05	5 hours
	06	6 hours
	07	7 hours
IP Protection rating	40	IP40
	42	IP42
	65	IP65

Product code example: HP100BA240140

### NOTE

\*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, also during NON-emergency conditions (mains present) are the Permanent (BA) versions.

# EMERGENCY LIGHTING

## Diva

Emergency-lighting lamps



LED emergency lamps with a compact minimalist design.



Product type	Emergency lighting device
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) – Non-maintained (NM)
Installation	Wall, Ceiling
Power supply voltage	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	6000K
Diffuser	Ultrasound-welded polycarbonate
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP protection rating	IP42, IP65 (*)
IK Protection rating	IK07
Operating temperature	from 0° to 40°C
Compliant with norms	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 grade is obtained with an accessories kit.

### ORDER CODES

p/n	Power <sup>(3)</sup>	Duration	Battery LiFePO <sub>4</sub> 3,2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [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



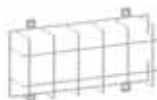
**OHDVPTK**  
Pictograms kit for DIVA



**OHX00BR45**  
Bracket for installation with a 45° inclination



**OHX00GRT**  
Protective metal grating  
for complete protection  
of the lamp body



**OHHBK**  
Kit for fixing on electrified bar



## Dexia

Emergency-lighting lamps



High-flux LED emergency lamp designed for industrial environments, department stores and car parks.



<b>Product type</b>	Emergency lighting device
<b>Versions</b>	Standard, Self-Test, BUS-supervised, Central-Battery
<b>Type</b>	Maintained (M) – Non-maintained (NM)
<b>Installation</b>	Wall, ceiling, surface/false ceiling mount
<b>Power supply</b>	220/230Vac, 50-60Hz
<b>Battery</b>	LiFePO <sub>4</sub> 3.2V
<b>Isolation class</b>	II
<b>Colour</b>	RAL9003 White
<b>Light source</b>	LED
<b>Colour temperature</b>	6000K
<b>Diffuser</b>	Ultrasound-welded polycarbonate
<b>Additional information</b>	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
<b>IP protection rating</b>	IP42, IP65 (*)
<b>IK Protection rating</b>	IK07
<b>Operating temperature</b>	from 0° to 40°C
<b>Compliant with norms</b>	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
<b>Dimensions</b>	322x140x50 mm

(\*) The IP65 grade is obtained with an accessories kit.

# EMERGENCY LIGHTING

## ORDER CODES

p/n	Power	Duration	LiFePO <sub>4</sub> 3,2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [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



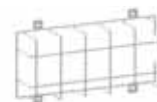
### OHDXPTK

Pictograms kit for DEXIA



### OHX00GRT

Protective metal grating  
for complete protection  
of the lamp body



### OH200BRI

Flush-mount box



### INICOM

Remote control for management of rest mode



### OHX00FCK

Plasterboard and false ceiling fastening kit



### OHBBK

Kit for fixing on electrified bar



# HP100

## Emergency-lighting lamps



Neat, compact easy to install emergency lamps. The use of new generation LED technology with exclusive patented

optics guarantees high light flow and reliability over time.



Product type	Emergency lighting device
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) – Non-maintained (NM)
Installation	Wall, ceiling, surface/false ceiling mount
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	6000K
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
	Test button and brightness dimmer
IP protection rating	IP40, IP65
IK Protection rating	IK07
Operating temperature	from 0° to 50°C
Compliant with norms	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 <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [lm] M	IP Protection rating	Recharge
HP100BE110140	11W	1h-1.5h	1.5	N/M	130-95	-	IP40	6h
HP100BE240140	24W	1h	1.5	N/M	250	-	IP40	6h
HP100BE110340	11W	3h-4h	3.3	N/M	130-95	-	IP40	12h
HP100BE240340	24W	3h	3.3	N/M	250	-	IP40	12h
HP100BA110140	11W	1h-1.5h	1.5	N/M-M	130-95	60	IP40	6h
HP100BA240140	24W	1h	1.5	N/M-M	250	120	IP40	6h
HP100BA110340	11W	3h-4h	3.3	N/M-M	130-95	60	IP40	12h
HP100BA240340	24W	3h	3.3	N/M-M	250	120	IP40	12h
HP100BE110165	11W	1h-1.5h	1.5	N/M	130-95	-	IP65	6h
HP100BE240165	24W	1h	1.5	N/M	250	-	IP65	6h
HP100BE110365	11W	3h-4h	3.3	N/M	130-95	-	IP65	12h
HP100BE240365	24W	3h	3.3	N/M	250	-	IP65	12h
HP100BA110165	11W	1h-1.5h	1.5	N/M-M	130-95	60	IP65	6h
HP100BA240165	24W	1h	1.5	N/M-M	250	120	IP65	6h
HP100BA110365	11W	3h-4h	3.3	N/M-M	130-95	60	IP65	12h
HP100BA240365	24W	3h	3.3	N/M-M	250	120	IP65	12h

# HP200

## Emergency-lighting lamps



Neat, compact easy to install  
emergency lamps.  
The use of new generation LED

technology with exclusive patented  
optics guarantees high light flow and  
reliability over time.



Product type	Emergency lighting device
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) – Non-maintained (NM)
Installation	Wall, ceiling, surface/false ceiling mount
Power supply	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	6000K
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
	Test button and brightness dimmer
IP protection rating	IP42, IP65
IK Protection rating	IK07
Operating temperature	from 0° to 50°C
Compliant with norms	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

### ORDER CODES

p/n	Power	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [lm] M	IP Protection rating	Recharge
HP200BE180142	18W	1h-1.5h	1.5	N/M	180-135	-	IP42	6h
HP200BE360142	36W	1h-1.5h	3.3	N/M	360-270	-	IP42	12h
HP200BE180342	18W	3h-4h	3.3	N/M	180-135	-	IP42	12h
HP200BE360342	36W	3h-4h	2 x 3.3	N/M	360-270	-	IP42	24h
HP200BA180142	18W	1h-1.5h	1.5	N/M-M	180-135	80	IP42	6h
HP200BA360142	36W	1h-1.5h	3.3	N/M-M	360-270	170	IP42	12h
HP200BA180342	18W	3h-4h	3.3	N/M-M	180-135	80	IP42	12h
HP200BA360342	36W	3h-4h	2 x 3.3	N/M-M	360-270	170	IP42	24h
HP200BE180165	18W	1h-1.5h	1.5	N/M	180-135	-	IP65	6h
HP200BE360165	36W	1h-1.5h	3.3	N/M	360-270	-	IP65	12h
HP200BE180365	18W	3h-4h	3.3	N/M	180-135	-	IP65	12h
HP200BE360365	36W	3h-4h	2 x 3.3	N/M	360-270	-	IP65	24h
HP200BA180165	18W	1h-1.5h	1.5	N/M-M	180-135	80	IP65	6h
HP200BA360165	36W	1h-1.5h	3.3	N/M-M	360-270	170	IP65	12h
HP200BA180365	18W	3h-4h	3.3	N/M-M	180-135	80	IP65	12h
HP200BA360365	36W	3h-4h	2x3.3	N/M-M	360-270	170	IP65	24h



## HP100 and HP200 accessories

### OH100BRI

Flush-mount box for HP100

### OH200BRI

Flush-mount box for HP200



### OHX00FCK

Plasterboard and false ceiling fastening kit



### OH100PTDW

Pictogram for HP100

### OH200PTDW

Pictogram for HP200 indicating down



### OHX00BR45

Bracket for installation with a 45° inclination



### OH100PTRG

Pictogram for HP100

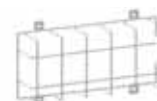
### OH200PTRG

Pictogram for HP200 indicating right



### OHX00GRT

Protective metal grating for complete protection of the lamp body



### OH100PTLF

Pictogram for HP100

### OH200PTLF

Pictogram for HP200 indicating left



### INICOM

Remote control for management of rest mode



### OHBBK

Kit for fixing on electrified bar



# EMERGENCY LIGHTING

## SPOTLED

Emergency spotlight



Flush mounting emergency spotlight with ultra-slim design and high performance light. It is equipped as standard with a symmetrical and asymmetrical lens.



Product type	Emergency lighting device
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) – Non-maintained (NM)
Installation	False ceiling mount
Power supply voltage	220/230Vac, 50/60 Hz
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	5700K
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP protection rating	IP40
IK Protection rating	IK07
Operating temperature	from 0° to 40°C
Compliant with norms	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	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [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





# CONVERTLED

Emergency lighting kit



Electrical power supply for emergency ceiling lights and LED modules.  
Compatible with all drivers with 6Vdc to 60Vdc output voltage, 2A max. current.  
Compatible with 6Vdc to 60Vdc LED modules.



Product type	Emergency lighting kit
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) with commercial driver – Non-maintained (NM)
Installation	False ceiling / Inside the ceiling light
Power supply voltage	220/230Vac, 50/60 Hz
Output voltage	Self-converting from 6V to 60V
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	II
Colour	RAL9003 White
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP protection rating	IP30
IK Protection rating	IK07
Operating temperature	from 0° to 40°C
Compliant with norms	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
Dimensions (WxHxD)	240.2x65x26 mm
Warranty	5 years
Package contents	packs of 25

## ORDER CODES

p/n	Output power	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Recharge
CNBA01	4W - 3W - 2W - 1,5W	1h - 1.5h - 2h - 3h	2 x 1.5	12h

## Accessories

**OHCNTB**  
Test button



**INICOM**  
Remote control for management of  
rest mode



## VERALED

Illumination lamp with emergency kit



Waterproof LED illumination lamp with emergency conversion kit.  
Ideal for industrial applications, department stores and car parks.

Product type	Illumination lamp with emergency kit
Versions	Standard, Self-Test, BUS-supervised, Central-Battery
Type	Maintained (M) – Non-maintained (NM)
Installation	Wall, ceiling, lighting busway
Dimensions	VRBA20: 600 x 90 x 95 cm VRBA50: 1200 x 90 x 95 cm
Power supply voltage	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Isolation class	I
Colour	Grey
Light source	LED
Colour temperature	5000K
Diffuser	Transparent polycarbonate
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
IP protection rating	IP65
IK Protection rating	IK08
Operating temperature	from 0° to 50°C
Compliant with norms	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

### ORDER CODES

p/n	Power	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non-maintained (NM)	MED. FLUX [lm] N/M	MED. FLUX [lm] M	IP Protection rating	Recharge
VRBA20	15W	1h-1,5h-2h-3h	2 x 1.5	N/M-M	620-500-370-300	1700	IP65	12h
VRBA50	48W	1h-1,5h-2h-3h	2 x 1.5	N/M-M	620-500-370-300	5100	IP65	12h

# HP320

Emergency-signalling lamps



Signalling lamps for escape routes, compact and flexible. It can be installed in any position by means of a bracket (supplied), for visibility at 20 meters and pictograms compliant with the international standard (ISO7010).

Product type	Signalling device
Versions	Self-Test, BUS-supervised, Central-Battery
Type	Maintained
Installation	Wall, flag, ceiling, recess, suspended
Power supply voltage	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Visibility distance	20m
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	6000K
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
	Test button and brightness dimmer
IP protection rating	IP40
IK Protection rating	IK07
Operating temperature	from 0° to 50°C
Compliant with norms	EN 60598-1, EN 60598-2-22, EN 62471
	EN 1838, ISO 3864-4, ISO 7010
Dimensions	217x176,5x41 mm

## ORDER CODES

p/n	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non-maintained (NM)	IP Protection rating	Recharge
HP320BA000340	3h	1.5	M	IP40	6h

# HP330

Emergency-signalling lamps



Safety lamps for escape route signalling, compact and versatile, installable in any position via a single bracket, 30m visibility distance, international standard compliant restoral (ISO7010).

Product type	Signalling device
Versions	Self-Test, BUS-supervised, Central-Battery
Type	Maintained
Installation	Wall, flag, ceiling, recess, suspended
Power supply voltage	220/230Vac, 50-60Hz
Battery	LiFePO <sub>4</sub> 3.2V
Visibility distance	30 m
Isolation class	II
Colour	RAL9003 White
Light source	LED
Colour temperature	6000K
Additional information	Dedicated terminal for inhibition function
	Dedicated terminal for rest mode function
	Test button and brightness dimmer
IP protection rating	IP40
IK Protection rating	IK07
Operating temperature	from 0° to 50°C
Compliant with norms	EN 60598-1, EN 60598-2-22, EN 62471
	EN 1838, ISO 3864-4, ISO 7010
Dimensions	322x231,5x41 mm



## ORDER CODES

p/n	Duration	Battery LiFePO <sub>4</sub> 3.2V [Ah]	Maintained (M) – Non- maintained (NM)	IP Protection rating	Recharge
HP330BA000140	1h	1.5	M	IP40	6h
HP330BA000340	3h	3.3	M	IP40	12h

## Accessories

**OH330FCK**

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

**OH3X0SPK**

Kit for suspension installation

**OH3X0GRT**

Protective metal grating  
for complete protection  
of the lamp body

**OH330PNDW**

PMMA panel with pictograms  
indicating down

**OH330PNRL**

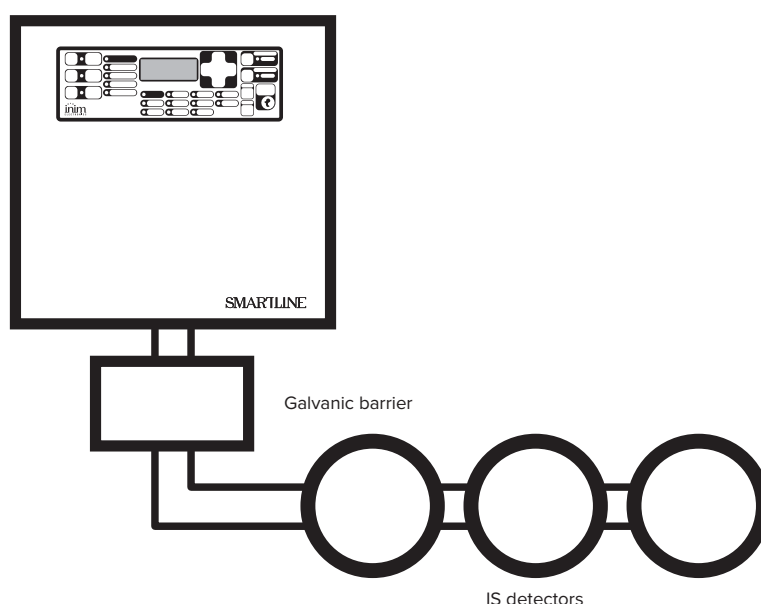
PMMA panel with pictograms  
indicating left/right

**INICOM**

Remote control for management of rest mode



## Conventional detectors and accessory items Atex Certified



ORBIS I.S. (Intrinsically 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 diagram illustrates the wiring method required for I.S. addressable detectors and the accessories to utilize.

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

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

**ORB-HT-51145** – I.S. A1R 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** – I.S. 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** – Intrinsically Safe Orbis call point for indoor application.

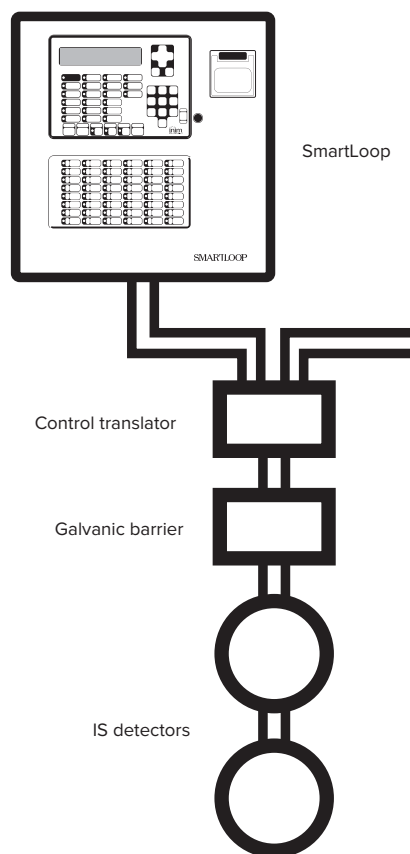
**55100-033** – Intrinsically Safe Orbis call point for outdoor application.

**29600-378** – Galvanic barrier for conventional detectors – DIN rail mount.





## Addressable detectors and Apollo XP95 accessory items Atex Certified



XP95 IS (Intrinsically 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 diagram illustrates the wiring method required for I.S. addressable detectors and the accessories to utilize.

**55000-640** – I.S. Addressable optical smoke detector – Approved E Ex ia IIC T5 (T4 to Ta < 60°C).

LPCB Cert. No. 010q

**55000-440** – I.S. Addressable heat detector –

Approved E Ex ia IIC T5 (T4 to Ta < 60°C).

LPCB Cert. No. 010p

**45681-215** – I.S. 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** – I.S. sounder is an audible signalling device for installation in explosive atmospheres – Category 1 (for zones type 0,1 and 2). – Approval ATEX – Ex II EEx ia IIC T4



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

**17-970330** – I.S. Sounder/flasher suitable for installation in explosive atmospheres – Category 1 (for zones type 0.1 and 2) – Approval ATEX – Ex II EEx ia IIC T4



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

**17-970362** – Zener Barrier for I.S. Sounders, DIN rail mount, capable of powering 2 sounders.

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



Tone	32 tones selectable by means of a DIP Switch
Sound output @ 1m	117 dB(A) (configurable)
IP protection rating	IP67
Operating voltage	24 Vdc
Current draw	265 mA
Operating temperature	-50°C - +55°C
Weight	3.4 Kg
Dimensions	181 (diameter) x 262 (height) mm

**TCB-0003** – Red flasher in explosion-proof enclosure for audible signalling in hazardous environments – Category 2 (for zones type 1 and 2) – Approval ATEX – Ex II 2G EEx IIC T4



Light output	5 J
IP protection rating	IP67
Operating voltage	24 Vdc
Current draw	300 mA
Operating temperature	-50°C - +40°C
Weight	2.45 Kg
Dimensions	153 (diameter) x 246 (height) mm

**17-970234** – Bell in flame-proof enclosure for audible signalling in explosive atmosphere – Category 2 (for zones type 1 and 2) – Approval ATEX – Ex II 2G EExd e IIC T6



Sound output @ 1m	105 dB(A)
IP protection rating	IP66
Operating voltage	24 Vdc
Current draw	320 mA
Operating temperature	-20°C - +40°C
Weight	3.5 Kg
Dimensions	200 (diameter) x 270 (length) mm

# ATEX EQUIPMENT AND FIRE-EXTINGUISHING ACCESSORY DEVICES

## Atex linear barrier

### ARDEA Eex S-SF – Atex Smoke Beam detector

– Barrier TX - RX – Cat. 2GD-EXD IICT6 – From 5 to 100m



## Accessories

### 29600-131

Alluminium mounting base to fit PG16 glands for exposed pipes. Allows the detector base to be

fitted in such a way that the rear of the detector is sealed and fitted to the external pipes.

### 29600-139

Alluminium mounting base to fit M20 glands for exposed pipes. Allows the detector base to be

fitted in such a way that the rear of the detector is sealed and fitted to the external pipes.



### 29600-196

Plastic mounting base to fit PG16 glands for exposed pipes. Allows the detector base to be

fitted in such a way that the rear of the detector is sealed and fitted to the external pipes.

## Fire suppression accessories

### 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.



## Call points in various colours



IC0020Y – Conventional call point in yellow

IC0020G – Conventional call point in green

IC0020B – Conventional call point in blue

IC0020W – Conventional call point in white

MCP3A-Y000SG-K013-65C\* – Conventional call point in yellow enclosure with transparent guard

MCP3A-B000SG-K013-66C\* – Conventional call point in blue with transparent guard

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

- ICB010Y** – Call point in yellow  
**ICB010G** – Call point in green  
**ICB010B** – Call point in blue  
**ICB010W** – Call point in white



## Keyswitch, supplied without label

- ICK010Y** – Call point in yellow  
**ICK010G** – Call point in green  
**ICK010B** – Call point in blue  
**ICK010W** – Call point in white



## ISS022\*\* – Audible/Visual sign

Red alarm sign complete with EN54-3 certified audible signalling and EN54-23 certified visual signalling. Comes with 'Fire alarm' written on it, available with different indications on request.



Sound output @ 1 m	92 dB(A)
Light output	EN54-23 W 4,6 - 9,1
Flash frequency	1 Hz

Operating voltage	11 – 30 Vdc
Consumption	50 mA
Dimensions (w x h x d)	293 x 130 x 75 cm
Operating temperature	from -10°C to +55°C

## ISS021\*\* – Audible/Visual sign

Visual/Audible alarm sign in red with certified EN54-3 audible signal capability, supplied with the wording 'Fire alarm.' Available with different alarm indications: 'Evacuate' and 'Extinguishing in progress,' to be ordered as an accessory item.



Sound output @ 1 m	92 dB(A)
Operating voltage	18 – 30 Vdc
Consumption	21mA (media)

Dimensions (w x h x d)	293 x 130 x 55 cm
Operating temperature	from -10°C to +55°C

\*Certified EN12094-3.

\*\*Refer to 'Accessories' section for available text.

## SmartLevel

### 24V power supply station



SmartLevel series power stations are ideal for powering all the devices located in the area protected by the detection system. They meet all the requirements of the EN54 standard, constituting fully supervised and certified power supplies. They are equipped internally with the new switching module with resonant technology and internal CPU for reliable, efficient and secure power management. Two models are available:

- 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, connectable 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 @ 27V 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: higher than 1%
- 3 Outputs, each one protected against short circuits and current limited to 4A (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
- Batteries supervision
- Batteries disconnection in case of deep discharge
- Fault signalling relay output
- Detection of dispersion-to-earth fault
- Certified CPD EN54-4

### SPS24060G

- LCD
- RS485 BUS connection
- Internal switching power-supply module 1.5A @ 27.6V
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm
- Weight (without batteries): 3 Kg



### SPS24160G

- LCD
- RS485 BUS connection
- Internal switching power-supply module 4 A @ 27.6V
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 mm
- Weight (without batteries): 6 Kg



### SPS24060S

- Connects to the detection loop
- Internal switching power-supply module 1.5A @ 27.6V
- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm
- Weight (without batteries): 3 Kg



### SPS24160S

- Connects to the detection loop
- Internal switching power-supply module 4 A @ 27.6V
- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 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. Each model is available in a 'in-box' version. It consists of a switching power supply module housed in a metal cabinet where two batteries 12V can be housed too.

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 – 1.5A power supply module

### BPS24060G – 1.5A power supply module in enclosure

- CPU based power supply
- Input voltage: 230Vac  $\pm$  15%, 50Hz
- Mains absorption: 0.4A
- Output voltage: 27.6Vdc
- Maximum current: 1.5Adc
- Stability: higher than 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
- Batteries disconnection in case of deep discharge
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

For the BPS24060G model:

- Battery housing for two 7Ah, 12V batteries
- Dimensions (HxWxD): 325x325x80 mm
- Weight (without batteries): 3 Kg

### IPS24160G – 4A power supply module

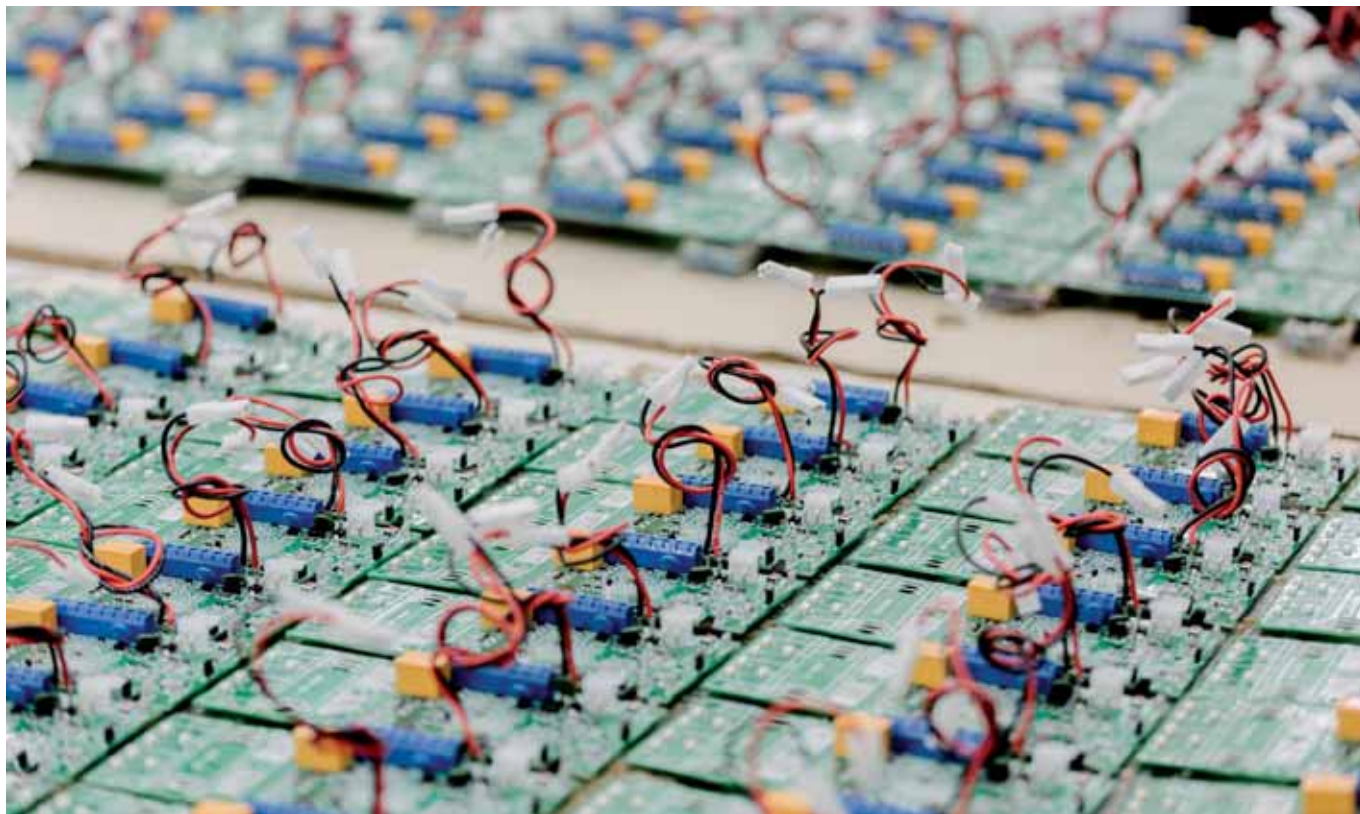
### BPS24160G – 4A power supply module in enclosure

- CPU based power supply
- Input voltage: 230Vac  $\pm$  15%, 50Hz
- Mains absorption: 0.9A
- Output voltage: 27.6Vdc
- Maximum current: 4Adc
- Stability: higher than 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
- Batteries disconnection in case of deep discharge
- Detection of dispersion-to-earth fault
- Internal temperature management of switching module

For the BPS24160G model:

- Battery housing for two 17Ah, 12V batteries
- Dimensions (HxWxD): 497x380x87 mm
- Weight (without batteries): 6 Kg



## 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

<b>SPS24060G</b>	24V, 1.5A power supply station with LCD and RS485 connection capability.
<b>SPS24160G</b>	24V, 4A power supply station with LCD and RS485 connection capability.
<b>SPS24060S</b>	24V, 1.5A power supply station with LED status indicators and Inim loop connection capability.
<b>SPS24160S</b>	24V, 4A power supply station with LED status indicators and Inim loop connection capability.
<b>IPS24060G</b>	1.5A power supply module.
<b>IPS24160G</b>	4A power supply module.
<b>BPS24060G</b>	1.5A power supply module in enclosure.
<b>BPS24160G</b>	4A power supply module in enclosure.
<b>ProbeTH</b>	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 fire-door holding electromagnets. This section describes a series of

electromagnetic locks for holding fire doors open and releasing them in the event of fire, the different models adapt to various types of doors.

### 01630I

Hold open fire door electromagnets with fixing base, power supply 24 Vdc pulling force 55 Kg., with base in zinc plated steel

and fixed counterplate with base in zinc plated steel.

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

### 01830I

Hold open fire door electromagnets with fixing base, power supply 24 Vdc pulling force 140

Kg., with base in zinc plated steel and fixed counterplate with base in zinc plated steel.



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

### 19001

Hold open fire door electromagnets, power supply 24 Vdc pulling force 55 Kg., with door release button. Enclosure in black ABS.

Supplied without counterplate, to be purchased separately.



### 19002

Hold open fire door electromagnets, power supply 24 Vdc pulling force 55 Kg., with door release button. Enclosure in black anodized

aluminium. Supplied without counterplate, to be purchased separately.



Power supply voltage	24 Vdc	Holding force	>55Kg
Current consumption	60 mA	Base dimensions	90 x 75 x 35cm

**18005**

Hold open fire door electromagnets, with fixed floor mount, operating voltage 24Vdc, holding force 55 Kg., and with door release button.

Body in black or white painted aluminium [DR 18005B]. Supplied without counterplate (to be purchased separately).



Power supply voltage	24 Vdc
Current consumption	60 mA

Holding force	>55Kg
Base dimensions	90 x 75 x 35cm

**01805Z**

Swivel counterplate with base in zinc plated steel for DR19001, DR19002 and DR18005

magnets. Compressive dimensions 65 x 65 x 54mm.

**01800Z**

Fixed counterplate with base in zinc plated steel for DR1901, DR1902 and DR1805 magnets.

Compressive dimensions 65 x 65 x 28mm.

**18101**

Holding electromagnets for fire doors, operating voltage 24Vdc, holding force 140Kg, and with door release button. Body in black painted steel.

Supplied without counterplate (to be purchased separately).



Power supply voltage	24 Vdc
Current consumption	70 mA

Holding force	>140Kg
Base dimensions	100 x 90 x 43cm

**01815Z**

Swivel counterplate with base in zinc plated steel for DR18101 electromagnets.

Compressive dimensions 65 x 65 x 54 mm.

**01810Z**

Fixed counterplate with base in zinc plated steel for DR18101 electromagnets.

Compressive dimensions 65 x 65 x 33 mm.

**01740**

Mounting telescopic bracket. Telescopic square-section bracket 40x40mm for horizontal wall or vertical floor mounting of holding electromagnets. Body in black painted steel.

180° swing door-retainer fixing plate. Length 140 mm (adjustable up to 200 mm).



## ACCESSORIES

### Ancillary devices

The products shown on this page are useful accessories for enhancing fire detection systems and their installation. Among these are plastic covers, adapters for external ducts, magnets

for checking the operating capacity of detectors, etc. Interface boards, battery-operated detector, useful for residential systems.

#### Interface boards

##### Smart485IN – 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.



##### REL1INT – 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 sounder/ flashers, diallers, etc.) directly from fire the

control panel. Based on switching technology, this highly efficient device produces low heat output. Maximum output current 1A.



#### Accessories for detectors

##### EB0010 – Detector mounting base

Detector base for 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

The base is equipped with a relay activated by the detector.

##### 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. To be installed under the detector base, h 34mm.

##### EB0040

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

##### EB0040H

2W heater for EB0040 bases.

##### EB0050

EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.

##### EB0060\*

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

##### 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.



## Various accessories

### IL0010

Remote indicator LED repeater that replicates the signal generated by a detector in alarm status.



### S/KARI MR

LED repeater for ceiling or floor installation  
Super bright LED light. 3Vdc, 24V power supply  
Structure in polycarbonate transparent white.

Light diffuser lens 'FIRE' sign in Red. IP42  
Protection rating



### IACPP10

IP54 enclosure for manual callpoints, suitable for indoor installations. It consists of a transparent polycarbonate enclosure that covers the call

point and is sealed by gaskets which keep out dust, grime and water. Access to the device is gained by simply lifting the cover.



### IACPP20

Waterproof enclosure for manual call points, suitable for outdoor installation. It consists of a transparent polycarbonate enclosure that covers the call point and is sealed by gaskets which keep out dust, grime and water. 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 SmartLight panels range. IT consists of two L shaped

bracket and a front panel metal made.



### INPROTCP

Metal protection frame for manual call points.



### CTS01

Sign in aluminum indicating the presence of a manual call point, 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 with 10 pieces)

**FOP46** 'DOOR ALARM' (box with 10 pieces)

**FOP47** 'SPEGNIMENTO IN CORSO' (box with 10 pieces)

**FOP48** 'EVACUARE IL LOCALE' (box with 10 pieces)

**FOP49** 'ALLARME GAS' (box with 10 pieces)

**FOP36** 'FIRE DO NOT ENTER' (box with 10 pieces)

**FOP37** 'EXTINCTION DISPARDADA' (box with 10 pieces)

**FOP38** 'GAS DISCHARGE' (box with 10 pieces)

**FOP39** 'FUEGO' (box with 10 pieces)

**FOP34** 'PRESENZA ACETILENE' (box with 10 pieces)

**FOP35** 'CARENZA OSSIGENO' (box with 10 pieces)

## Text label for audible/visual signalling device PLEXI\_ES2000

**PLEXI\_ES2000#1DX:** 'ALLARME INCENDIO' warning sign with indicating RIGHT

**PLEXI\_ES2000#1SX:** 'ALLARME INCENDIO' warning sign with indicating LEFT

**PLEXI\_ES2000#2DX:** 'FIRE ALARM' warning sign with indicating RIGHT

**PLEXI\_ES2000#2SX:** 'FIRE ALARM' warning sign with indicating LEFT

**PLEXI\_ES2000#3DX:** 'EVACUARE IL LOCALE' warning sign with indicating RIGHT

**PLEXI\_ES2000#3SX:** 'EVACUARE IL LOCALE' warning sign with indicating LEFT

**PLEXI\_ES2000#4DX:** 'SPEGNIMENTO IN CORSO' warning sign with indicating RIGHT

**PLEXI\_ES2000#4SX:** 'SPEGNIMENTO IN CORSO' warning sign with indicating LEFT

**PLEXI\_ES2000#5DX:** 'ALLARME GAS' warning sign with indicating RIGHT

**PLEXI\_ES2000#5SX:** 'ALLARME GAS' warning sign with indicating LEFT

# Detectors test

### SOLO A10 – Tester aerosol for smoke detectors

Spray can containing aerosol for testing smoke detectors, a non-flammable product specifically designed to test the operation of the detectors without making them dirty or compromising their functionality. Thanks to its special formula,

it guarantees rapid activation and equally rapid cleaning of the chamber after activation, minimizing the time required for the detector test. 125 ml pack.



### SOLO330 – SOLO A10 aerosol dispenser

Houses SOLO A3 or SOLO A10 canisters (not included) and allows the delivery of the aerosol over the detector by simply exerting light pressure from the bottom upwards. Combined

with the telescopic extension shown below, it allows the testing of detectors positioned as high up as 9m.



### SOLO200 – Detector removal/replacement tool

It allows you to hook the detector that is mounted to the ceiling and detach it from its base, this tool is indispensable for cleaning operations or replacement of detectors as it

eliminates the need to climb ladders. Combined with the telescopic extension shown below, it allows the removal of detectors positioned as high up as 9m.



### SOLO461 – Cordless heat detector tester

Battery operated device for testing heat detectors, it allows quick and efficient testing of the detector operating capacity.

Combined with the telescopic extension

shown below, it allows the testing of detectors positioned as high up as 9m.



### 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°2 610-001 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

**E63-12PACK-001 – SOLO365 Smoke Cartridge**

For use with SOLO365 Electronic Smoke Detector Tester. Supplied in Packs of 12.

**SmokeSable – Smoke test aerosol with hand held telescopic pole**

Spray can for smoke detector test, suitable for hand held use, include a telescopic dispenser

for better smoke flow direction.

**SOLO100 – Telescopic pole: 4.5m**

Extends from 1.26m to 4.5 m by means of 4 easy-lock telescopic sections. It can reach detectors installed up to a height of 6m and can

be further extended by attaching a maximum of 3 SOLO 101 poles to reach detectors installed as high up as 9m.

**SOLO101 – 1.13 m single pole**

Reaches detectors installed at a height of 2.5m.

**SOLO108 – Telescopic pole: 2.5m**

Extends from 1.26m to 2.5 m by means of 2 easy-lock telescopic sections. Reaches detectors installed up to a height of 4 m. It can

be combined with an additional SOLO 101 pole in order to reach detectors installed higher.

## 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 adapter**

RS232 - USB connection cable between PC and Inim control panels.

**Probe-TH – Thermal probe**

Thermal probe for battery charge optimization.



# 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. SmartLook also finds its niche in hotel receptions, congress centres, shopping malls, etc., for the monitoring of the security system status and interaction with it. Thanks to its modularity, SmartLook is perfectly at ease in both small and large applications. The flexibility of the system allows it to supervise analogue addressable control panels from the Previdia and SmartLoop series as well as 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 Previdia, SmartLoop and SmartLine series. SmartLook is a installing software based on graphic

maps. The graphic maps are linked together in a 'tree' structure. Each map accepts an arbitrary number of objects. An object can be a supervised element (detector, partition, zone, output, etc.), a connection to another map, a connection to a web page (VCR web interface) or a command button, possibly, with controlled access. The operator can interact with the system in real-time. In this way it is possible to control the status of the of detectors, carry out operations such as reset, bypass, ion activation of outputs, etc. The SmartLook software integrates video capabilities that consent to the integration 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 and PrevidiaLeague 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

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

\*Microsoft® and Windows® are the 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 SmartLine, SmartLight e 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](http://www.inim.biz).

### Previdia/STUDIO

Programming and control software for Previdia control panels

The Previdia/STUDIO configuration and management software is an indispensable tool for system commissioning and maintenance. 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. Capable of operating both at individual control panel and network level, it makes use of a graphic interface designed to be used also on touch screen devices. The software is completed with effective diagnostic functions that allow accurate fault searches and the adjustment of the various intervention thresholds. Equally as effective



are the reporting functions which allow, starting from the data automatically collected by the control panel, the creation 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 is capable of connecting to the system via RS232, USB or TCP/IP connection, runs in Windows operating systems and can be downloaded free of charge by logging in and registering on website [www.inim.biz](http://www.inim.biz).

### F-COM/STUDIO

The 'F-COM/STUDIO' PC software can be obtained free of charge from the Inim 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.

NOTES







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