SMARTLINE
CONVENTIONAL DETECTION

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

FIRE ALARM AND EXTINGUISHING SYSTEMS

SmartLine

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

Accessory items

SmartLine/8Z

8 zone expansion board equipped with an additional supervised output.

SmartLetUSee/LCD-Lite

Remote repeater panel with display and keypad for user operations.

SmartLAN/485

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

SmartLetLoose/ONE

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

SmartLine/LOGEXP

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

SmartLevel

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

Features and Technical specifications

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

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

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

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

SMARTLINE
CONVENTIONAL DETECTION

EN 54-2   EN 54-21
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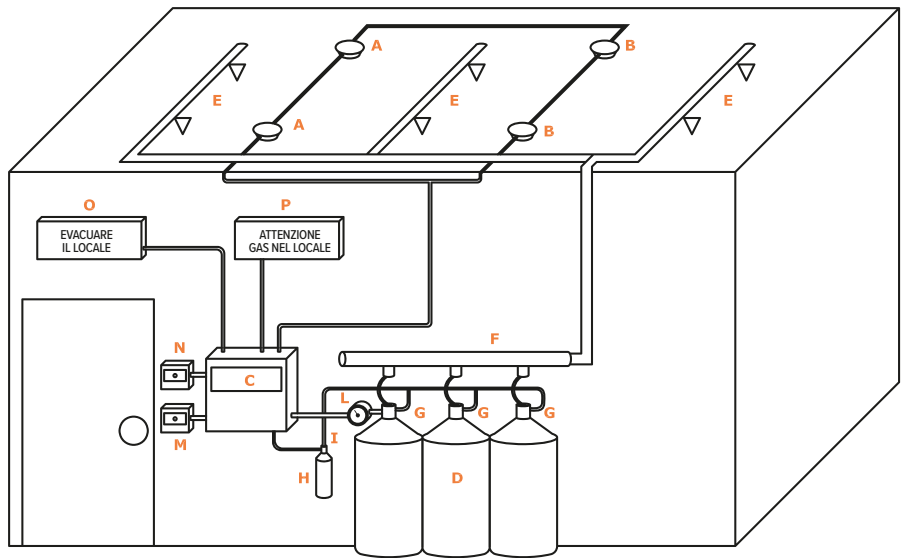EN 12094-1

FIRE ALARM AND EXTINGUISHING SYSTEMS

Fire extinction

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

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

LEGENDA

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

EVACUARE IL LOCALE
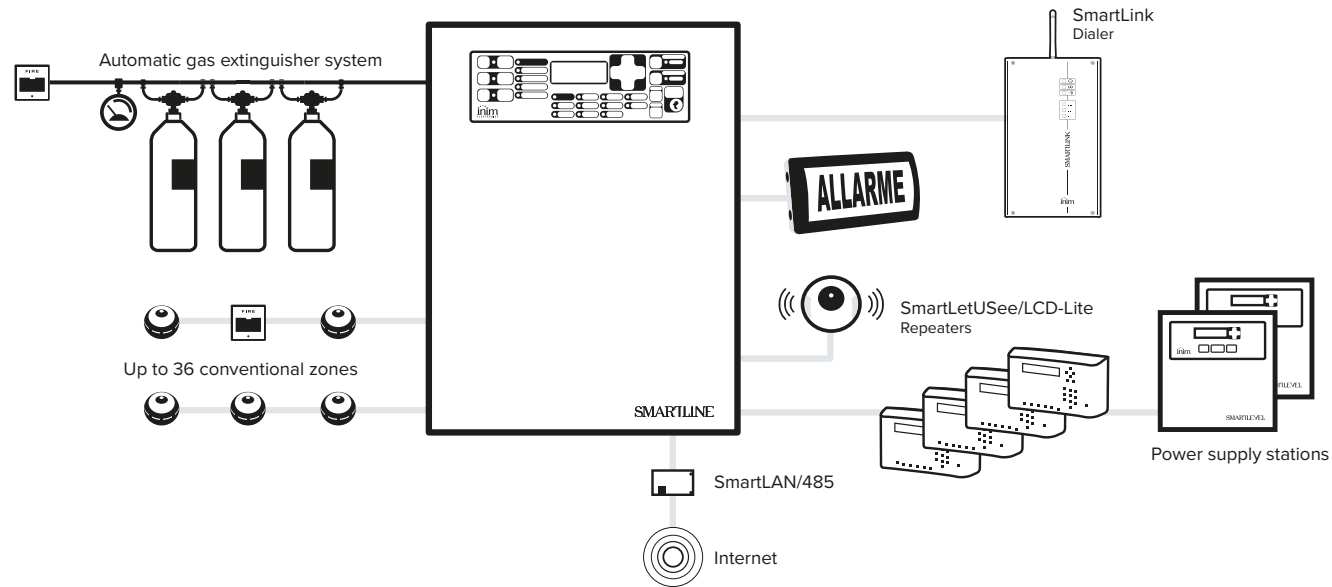
ATTENZIONE GAS NEL LOCALE

Application diagram.

Main features

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

ORDER CODES

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

Application diagram

SmartLink Dialer

Automatic gas extinguisher system

ALLARME

SmartLetUSee/LCD-Lite Repeaters

Up to 36 conventional zones

SMARTLINE

Power supply stations

SmartLAN/485

Internet

Programming software

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

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

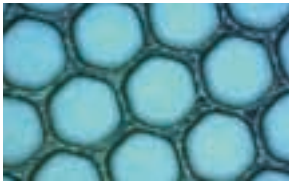# Iris

Conventional detectors

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

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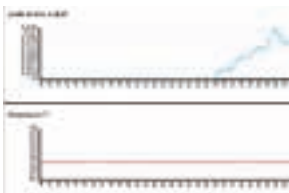
Main features

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

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

Insect screen

Smoke and temperature graph

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

ID100 Optical smoke detector

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

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

LPCB
Cert. No. 991c

UL EU

ID200 Heat detector

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

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

LPCB
Cert. No. 991e

UL EU

ID300 Smoke and Heat detector

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

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

LPCB
Cert. No. 991a

UL EU

Conventional detection

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

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

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

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

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

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

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

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

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

Manual call-points

IC0020 Manual callpoint

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

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

LPCB
Cert. No. 991j

IC0011E Manual callpoint for door installation (IP67)

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

Remote indicators

IL0010 Remote indicator

Remote fire-warning indicator.

EITK2000-ToolKit
Configuration, maintenance and diagnostics system

Front view of driver

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

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

Smoke and temperature graph on display

EITK2000 ToolKit

* il kit comprende EDRV2000 e EITK-PWSP.

ORDER CODES

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