security solutions

SmartLine

Conventional control panels with 2 zones or 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, 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.

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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.

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

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

- 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)
- Battery housing for two 7Ah - 12V batteries (for SmartLine020) or two 17Ah - 12V batteries (for SmartLine036)
- Dimensions (HxWxD for SmartLine020): 325x325x80mm - (HxWxD for SmartLine036): 497x380x87mm
- Weight (without batteries): SmartLine020 = 3Kg; SmartLine036 = 6Kg

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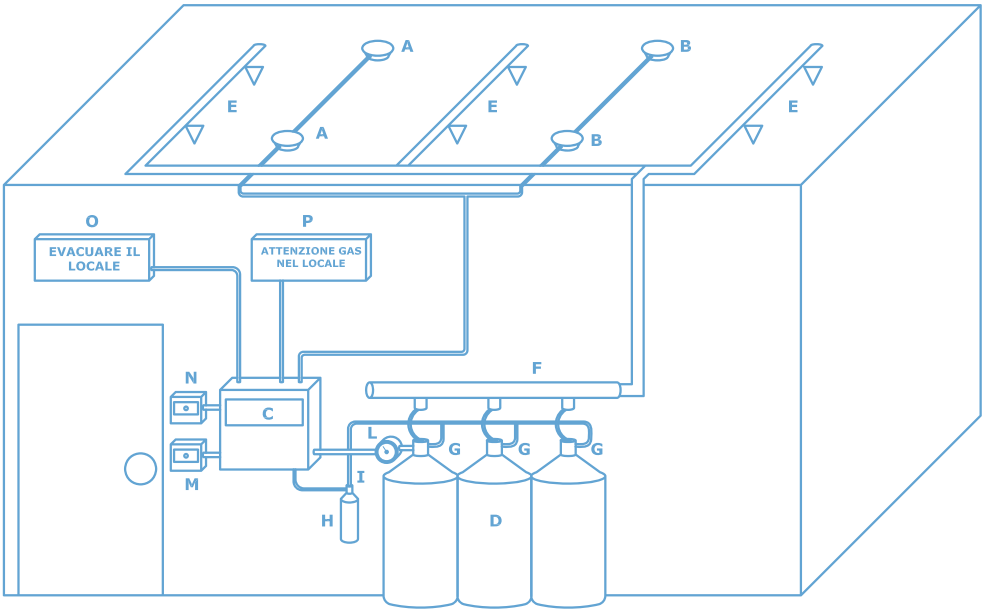
Fire extinction

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).

Diagram key

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.



Esempio tipico di sistema di spegnimento a gas.

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

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SmartLine020-2: non-expandable 2 zone conventional control panel
SmartLine020-4: conventional control panel with 4 zones expandable to 20
SmartLine036: conventional control panel with 4 zones expandable to 36
SmartLine/8Z: 8 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
IPS24040: switching power supply/battery charger 1.4A@27.6Vdc
IPS24140: switching power supply/battery charger 4A@27.6Vdc
ProbeTH: thermal probe for optimized battery charge

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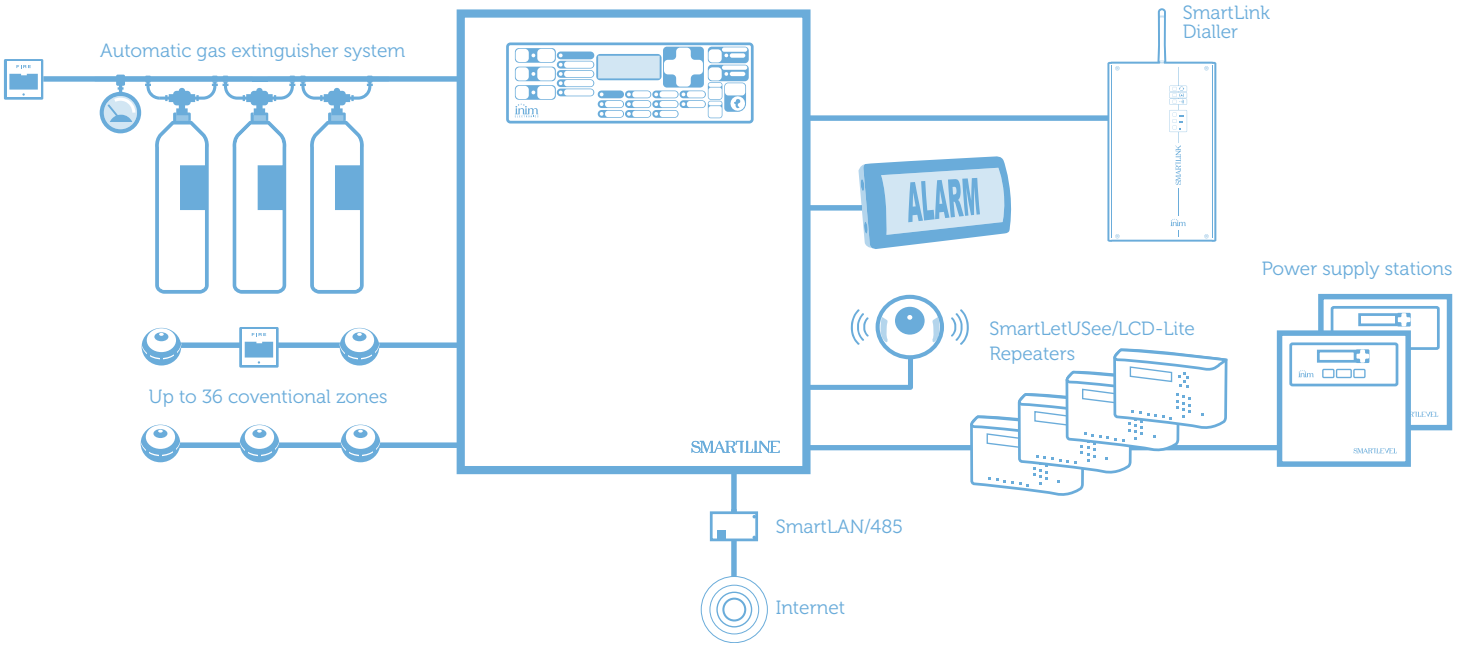
Programming software

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.

Application diagram



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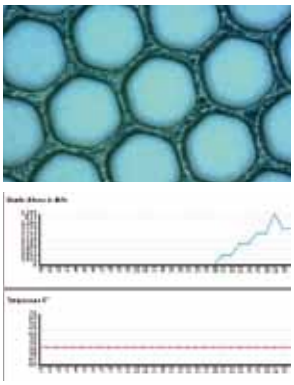
Iris

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 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

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		

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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 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; 0.12dB/m; 0.15dB/m).

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.

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).

- 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

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EB0010 Detector base

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

EB0020 Relay base

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

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