

ID300

ED300 Smoke and heat detector



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.

IRIS series detectors, as a result of advanced technologies based on new-generation microprocessors, represent the most advanced technology that fire detection equipment can offer today. They provide a vast spectrum of options and flexible functions, all configurable through the EDRV1000 Driver (Versa++ technology). A sophisticated set of algorithms, custom created by Inim's R&D professionals, provide these detectors with unequalled reliability and the highest immunity to false alarms.

Each device is identified by a unique factory-assigned serial number. Therefore, these devices do not require the use of an address programmer. The serial number is located on the device label and on two stickers which can be positioned on the system layout and on the mounting base.

VERSA ++ technology allows these detectors to be configured in accordance with the required detection method. This allows the detectors to adapt perfectly to external conditions and provide prompt, effective detection of events.



The EDRV1000 driver will allow you to work on the following parameters made available by **VERSA++** technology:

- Operating mode selection (flashing on LED, flashing on remote indicator).
- Heat and smoke threshold selection.
- Manual activation of the LED.
- Fault report enquiry.
- Complete diagnostics.

Main features

- Newly designed optical chamber.
- Sealed upper-section.
- 500 µm hole-diameter mesh insect screen.
- Tricolour LED: red for alarm; green flash (optional) for identification after manual activation from the control panel; yellow for trouble (fault or high level of contamination in the optical smoke chamber).
- Versa++ technology.
- 5 different operating modes (configurable via the EDRV1000 driver);
 - "PLUS" mode: the detector will trigger an alarm when the sensed values exceed the programmed smoke or temperature threshold. In the event of a rapid rise in temperature, the smoke detection sensitivity will be increased to its maximum value. This operating mode, characterized by high sensitivity, allows detection of fast-burning blazing fires (for example, inflammable liquids such as alcohol).
 - "OR" mode: the detector will trigger an alarm when the sensed values exceed the programmed smoke and temperature thresholds. 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, smoldering 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 sensed values exceed the set smoke and temperature thresholds at the same time. This operating mode lowers the false alarm rate. However, given the reduced response, it is necessary to evaluate the risk factor before selecting this mode.
 - "SMOKE" mode: the detector will trigger an alarm when the sensed value exceeds the set smoke threshold (0.08 – 0.10 – 0.12 – 0.15 dB/m).
 - "HEAT" mode: the detector will trigger an alarm when the sensed value exceeds the set temperature threshold (A2S - A1R – B – BR).
- Complete Diagnostics: contamination level reading and values measured in real-time (by means of EDRV1000).
- Non-resettable alarm counter.
- Memory of the smoke and temperature levels measured in the five-minute period prior to the last alarm.
- Vast range of options (configurable by means of EDRV1000 driver).

Technical specifications

- Certifications: LPCB CPD EN54/pt5-pt7.
- Detection principle: heat and light scattering mass (Tyndall effect).
- Alarm transmission type: polling independent.
- Identification of contaminated/faulty detector.
- Sampling: depends on the selected operating mode.
- Power voltage: 19-30Vdc.
- Current draw during standby: 90µA.
- Current draw during alarm: Max40mA.
- Sensitivity:
 - Thermistor: A2S (fixed threshold at 58°C), A1R (fixed threshold at 58°C and rate-of-rise), B (fixed threshold at 72°C), BR (fixed threshold at 72°C and rate-of-rise).
 - Optical smoke chamber: 0.08 – 0.10 – 0.12 – 0.15 dB/m.
- Operating modes: AND / OR / PLUS / HEAT / OPTICAL SMOKE.
- Base fitting: bayonet coupling.
- Protection rating: IP43.
- Height with EB00X0 base: 54 mm.
- Diameter: 109 mm.
- Weight (including base): 160 g.



ORDER CODES

ID300: Conventional heat and smoke detector.

EB0010: Mounting base for ENEA and IRIS detectors.

EB0020: Relay base for ENEA and IRIS detectors.

BDTB: EB00X0 adaptor base for PG16 surface-mounted raceways.

FI100: Remote indicator.

EITK100: ToolKit for device maintenance and configuration.

REFER TO

ITD002: Iris Detectors Wiring Diagram.

ITI004: Enea and Iris Detectors Installation.