

ED300



ANALOGUE ADDRESSABLE SMOKE AND HEAT DETECTOR

ED300 detectors come from the **ENEA** series of the Inim Electronics.

Each device from the ENEA series 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. Once the loop wiring is complete, a manual programmer or a control panel via the **LoopMap** application, enrolls all the connected devices automatically and reconstructs a map indicating the wiring order of the connected devices, "T" junctions and all the physical characteristics of the Loop. LoopMap technology allows you reconstruct the exact installation layout and thus create an easy-to-use, interactive loop map which greatly simplifies and speeds up searches relating to system faults and maintenance work.

The serial self-addressing function, developed by Inim's R&D professionals, allows you to add new devices to an existing system without reprogramming it. In this way, the **LoopMap** specifications remain unchanged and the new devices are assigned available logical addresses (in order) and correctly positioned on the interactive map.

The self-addressing function also eliminates many of the problems connected with the manual addressing procedure, such as time-consuming operations on rotary/DIP switches and errors caused by duplicated or wrong addresses and similar problems.

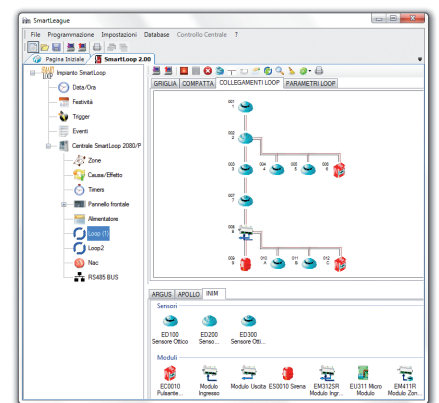
Versa++ technology allows these detectors to be configured in accordance with the required detection method. This allows the detectors to adapt perfectly to external conditions and provide prompt, effective detection of events.

The following parameters are available:

- Operating mode selection (flashing on LED, flashing on remote indicator)
- Sensitivity adjustment of the thermistor and optical chamber
- Manual activation of the LED
- Fault report enquiry
- Complete diagnostics

MAIN FEATURES

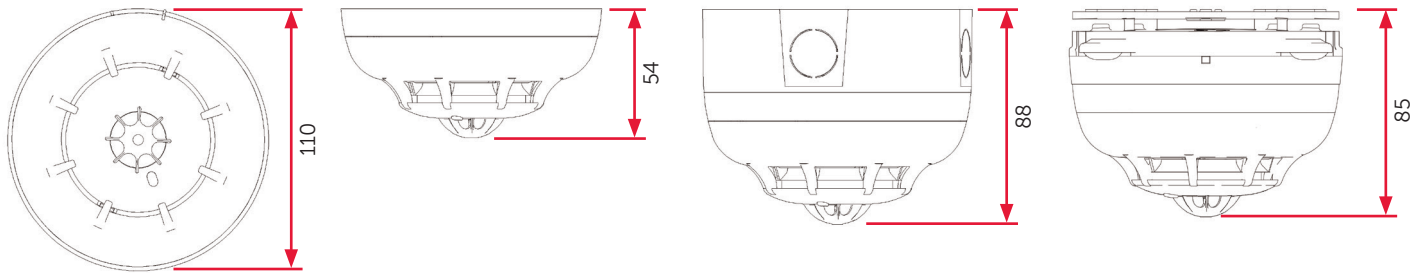
- 500 µm hole-diameter mesh insect screen
- Tricolour LED: red for alarm; green flash (optional) for identification after manual activation from the control panel; yellow for trouble (fault or high level of contamination in the optical smoke chamber)
- Built-in short-circuit isolator
- 240 addresses
- LoopMap Technology
- Versa++ Technology
- "WARNING" signal with programmable smoke and temperature thresholds
- Different SMOKE sensitivity for day and night mode
- Self-addressing (each device is identified by a factory-assigned serial number)
- "Interrupt" function: allows detectors to engage the control panel and communicate alarm or fault conditions instantly.
- Supervised remote output configurable from the control panel
- Automatic recognition of remote signaller connection
- 4 different smoke detection thresholds
- 4 different operating mode for the thermistor (A1R, A2S, BR, B)
- 5 different operating modes:
 - "PLUS" Mode: the detector will trigger an alarm when the measured values exceed the set smoke threshold, or when the measured values exceed the set heat threshold. Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to 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 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
- Non-resettable alarm counter
- Memory of the smoke and temperature levels measured in the five-minute period prior to the last alarm
- Setting options via manual programmer or via software



TECHNICAL SPECIFICATIONS

- Certification: CPR EN54/pt5-pt7-pt17
- Detection principle: heat and light diffusion (Tyndall effect)
- Alarm transmission type: polling independent
- Identification of contamination or fault on detector
- Sampling: depends on the selected operating mode
- Power voltage: 19-30Vdc
- Current draw during standby: 200µA
- Current draw during alarm: max10mA
- Sensitivity:
 - Thermistor: A2S (fixed threshold at 58°C)
AIR (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 / SMOKE
- Operating temperature: from -5°C to +40°C
- Base fitting: bayonet coupling
- Degree of protection: IP40
- Height with EB0010 base: 54mm
- Height with EB0030 deep base: 88mm
- Height with ESB10xx sounder base: 85mm
- Diameter: 110mm
- Weight (base included)

DIMENSIONS



WIRING DIAGRAMS TABLES

ITD001 Enea Detectors Wiring Diagram
ITD003 Enea Detectors Wiring Diagram
ITI004 Enea and Iris Detectors Installation

ITD007 ESB010 Sounder Base Wiring diagram
ITD008 ESB020 Sounder Beacon Base Wiring diagram
ITD009 EB020 Relay Base Wiring diagram

ORDER CODES

ED100 Analogue addressable smoke detector
ED200 Analogue addressable heat detector
ED300 Analogue addressable smoke and heat detector
IL100 Remote indicator
ESB10X0 Analogue addressable bases with audible/visual signalling
ISB10X0 Non-addressable bases with audible/visual signalling

EB0010 Mounting base for ENEA and IRIS detectors
EB0020 Relay base for ENEA and IRIS detectors
EB0030 Deep base
EB0040 Base protected against dripping water
EB0050 Spacer for EB0010 mounting base
EB0060 Base with integrate buzzer