

ED100

Analogue addressable optical smoke detector





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 today. They provide a vast spectrum of options and flexible functions, all configurable directly 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 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.

Once the loop wiring is complete, the EDRV1000 driver or control panel (SmartLoop/SmartLight) 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 innovative 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 eliminates many of the problems connected with the manual addressing procedure, such as timeconsuming operations on rotary/DIP switches and errors caused by duplicated or wrong addresses and similar problems. LoopMap technology not only makes the self-addressing process more reliable, it also speeds up fault searches, facilitates system expansion, simplifies changes and assures greater flexibility and lower costs.

Inim's new technology combines the advantages of manual addressing with the cutting-edge efficiency of a self-addressing process.

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 made available by VERSA++ technology:

- Operating mode selection (flashing on LED, flashing on remote indicator).
- Optical chamber sensitivity adjustment.
- Manual activation of the LED.
- Fault report enquiry.
- Complete diagnostics.



Main features

- Newly designed removable 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 fault (short-circuit or high level of contamination in the optical smoke chamber).
- Built-in short-circuit isolator on each device.
- Up to 240 devices connectable to the loop.
- LoopMap Technology.
- Versa++ Technology.
- "WARNING" signal with programmable thresholds and operating 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.
- Drift compensation for sensor drift caused by dust in the chamber.
- 4 different smoke detection sensitivity thresholds.
- Complete Diagnostics: contamination level in the optical chamber and real-time values.
- 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.

Technical specifications

- Certifications: LPCB CPD EN54/pt7-pt17 certificate N° 0832-CPD-1448.
- Detection principle: light diffusion (Tyndall effect).
- Type of alarm transmission: polling independent.
- Identification of contaminated or faulty detector.
- Sampling: every 4 seconds.
- Power supply voltage: 19-30Vdc.
- Current draw during standby: 200µA.
- Current draw during alarm: Max 10mA.
- Sensitivity: 0.08 0.10 0.12 0.15 dB/m.
- Operating temperature: -5°C +40°C.
- Protection rating: IP43.
- Base fitting: bayonet coupling.
- Height with EB00X0 base: 46 mm.
- Height with EB00X0 base and ESB010 sounder base: 82 mm.
- Diameter: 109 mm.
- Weight (including base): 160 g.



ORDER CODES

ED100: Self-addressing analogue smoke detector. EB0010: Mounting base for ENEA and IRIS detectors. EB0020: Relay base for ENEA and IRIS detectors. ESB010: Sounder base for attachment to EB00X0 base.

REFER TO

ITD001 - Enea Detectors Wiring Diagram. ITD003 - Enea Detectors Wiring Diagram. ITI004 - Enea and Iris Detectors Installation. **ESB020:** Sounder beacon base for attachment to EB00X0 base. **BDTB:**EB00X0 adaptor base for PG16 surface-mounted raceways. **F1100:** Remote indicator.

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

