

Enea

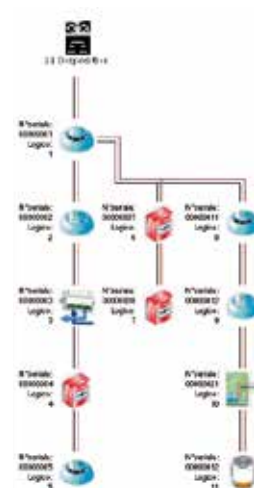
Addressable analogue detectors



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. They provide a vast spectrum of options and flexible functions, all configurable 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 unequaled reliability and the highest immunity to false alarms. Thanks to Inim's leading-edge LoopMap technology, you

can now connect to the control panel by means of a computer or EDRV1000 driver and reconstruct the exact installation topology and obtain an easy-to-use, interactive loop layout map which greatly simplifies and speeds up searches relating to faults and maintenance work. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service. And, therefore, hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

- Newly designed optical chamber with sealed upper-part and 500 µm holes diameter mesh insect screen.
- Tri-colour LED: red for alarm, green for stand-by flashing (optional) and for localization by means of manual activation from the control panel, yellow for fault (chamber contamination, short circuit isolator)
- Integrated short-circuit isolator in each device
- Up to 240 devices connectable to the loop
- Automatic addressing (each device is identified by a factory-assigned serial number)
- 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
- Sensitivity selection for smoke and heat thresholds
- Operating mode selection (for ED300 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.
- Memory of the smoke and temperature levels measured in the five-minutes period prior to the last alarm detected
- Vast range of settable options
- Bypass plate on the base to give continuity to the line in the event of removal of a detector, possibility to test loop wiring continuity.



Parameter	ED100	ED200	ED300
Power supply voltage	19-30 Vdc		
Standby current consumption	200 µA		
Alarm current consumption	Max 10 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) AND – OR – PLUS Mode
Operating temperature	-5°C + 40°C		
Height (base included)	46 mm	54 mm	
Diameter	110 mm		
Weight (with base)	160 g		
Weight (without base)	90 g		

EU311 – Micromodule

The EU311 micromodule, due to its reduced-size, can be housed directly inside the enclosure of the device it controls (call point, sounder/flasher, beam detector, etc.), it connects directly to the

loop and is equipped with a supervised input (capable of controlling the status of a device), a loop-powered output (capable of driving of one audible/visual signalling devices).



- 1 supervised input
- 1 loop-powered output
- Built-in short-circuit isolator
- Automatic addressing (each device is identified by a factory-assigned serial number)

	EM312SR	EM110	EM411R	EU311
Power supply voltage	19 – 30Vdc	19 – 30Vdc	19 – 30Vdc	19 – 30Vdc
Current draw during standby	80 µA	75 µA	1.2 mA	80 µA
Current draw during alarm	20 mA	20 mA	60 mA	20 mA
Height	53 mm	53 mm	53 mm	40 mm
Width	100 mm	100 mm	100 mm	54 mm
Depth (including terminals)	29 mm	29 mm	29 mm	15 mm
Weight	66 g	66 g	66 g	15 g

EM322AC – Module with 2 inputs and 2 relay outputs @230Vac

The EM322AC module connects directly to the loop and is equipped with two supervised inputs (capable of controlling the status of external devices) and two relays capable of driving 230 Vac mains-voltage loads.

For each of the two output relays it is possible to enable a supervisory function that allows you to check whether there is voltage across the contact when the relay is in stand-by status.



- 2 supervised inputs
- 2 relay outputs @ 230 Vac with optional load supervision function
- Built-in short-circuit isolator
- LEDs to indicate the status of inputs, outputs and communication with the control panel
- Automatic addressing (each device is identified by a factory-assigned serial number)
- DIN rail mounting compatibility
- Power supply voltage: 19 ÷ 30Vdc
- Current draw during standby: 80µA
- Current draw during alarm: 10mA
- Dimensions: 113x71x43 mm
- Weight: 130g

EM3xx – Multi Input/output module and conventional line interface

The module connects to the loop and provides different inputs and outputs depending on the model (see table). In the versions with 4 inputs, 2 of them can be configured as conventional line interface

powered from loop or from a local power supply. The 4 outputs are, depending on the model, supervised for the management of audible/visual signallers or dry contacts.



Model	Inputs (selectable as conventional zone)	Outputs
EM344S	4 (2)	4 (supervised)
EM344R	4 (2)	4 (voltage free)
EM340	4 (2)	//
EM304S	//	4 (supervised)
EM304R	//	4 (voltage free)

Bases



EB0010 – Detector mounting base

Detector base for 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

The base is equipped with a relay activated by the detector.



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. To be installed under the detector base, h 34mm.



EB0040

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

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



EB0050

EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



EB0060

Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

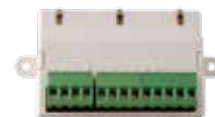
* Not for EU market.

Modules

EM312SR – Input output module

The EM312SR connects directly to the loop and is equipped with a supervised input (capable of controlling the status of external devices), a supervised output (capable of driving of one or more

audible/visual signalling devices) and a voltage free output (capable of driving all types of external devices, for example, electromagnets, etc).



- 1 supervised input
- 1 supervised output
- 1 supervised input for the activation of the devices connected to the output
- 1 voltage free output
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)

EM110 – Input module

The EM110 connects directly to the loop and is equipped with a supervised input

(capable of controlling the status of external devices).

- 1 supervised input
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)



EM411R – Conventional zone interface module

The EM411R zone interface connects directly to the loop and allows conventional zones (maximum 32 devices)

to be interfaced to Inim's addressable analogue systems.

- 1 conventional line input
- 1 relay output (2 voltage-free contacts)
- Built-in short-circuit isolator
- 3 multicolour LEDs for input/output/isolator status signalling
- Automatic addressing (each device is identified by a factory-assigned serial number)





ED100 – 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. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m – 0.10 dB/m – 0.12 dB/m - 0.15dB/m).



ED200 – Heat detector

The detector can be set in the following modes: A1R (fixed threshold at 58°C with thermovelocimetric detection), B (fixed threshold at 72°C), A2S (fixed threshold at 58°C), BR (fixed threshold at 72°C with thermovelocimetric

detection). As a result of its high flexibility, this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.



ED300 – Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving inflammable

liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on the control panel by selecting from the following:



- **PLUS Mode (set at factory):** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). 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 ED100), or when the measured values exceed the set heat threshold (configurable as per the ED200). 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 ED100 and ED200) are exceeded at the same time. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- **SMOKE Mode:** the detector will operate as per the ED100.
- **HEAT Mode:** the detector will operate as per the ED200.

Vega

Analogue addressable detector series



All Vega series detectors are certified in accordance with the applicable EN54 standards and are CE marked in accordance with the European Construction Products Directive (CPD) by BSI.

VEGA V350 – Intelligent thermal detector

This detector provides an advanced method of detection combined with sophisticated analysis and control panel communication. It uses an accurate thermistor to sense temperature changes in the protected environment. This

electronic sensing method ensures detection efficiency and high immunity to false alarms. It is programmable by means of the VPU100 field programmer as Rate-of-rise or Fixed high temperature.

VEGA V200 – Optical heat detector

The sophisticated algorithm implemented inside analyzes both the quantity of smoke detected in the chamber and the changes in

the ambient temperature perceived by the thermistor, guaranteeing a rapid and effective response even in the event of the start of a fire characterized by low visible smoke emission.

Decor line

V100, V200 and V350 detectors are also

available with décor line covers for aesthetically demanding environments.



Modules



Wall mounting



Minimodule

Single supervised input	VM1100	VMM1100 (VdS G212064)
Single supervised output	VMC100	VMMC100 (VdS G212066)
Input/Supervised Output	VMIC100	VMMIC100 (VdS G212067)
Input/Output Voltage free relay	VMIC120	VMMIC120 (VdS G212065)
Unsupervised output	VMC120	VMMC120 (VdS G212063)

ORDER CODES



VMCZ100

This device allows you to interface a line of conventional devices (detectors, call points, etc.) to the loop. Supplied in its own enclosure 130x95x60 with IP65 protection rating.



VMIC404

This device occupies 8 addresses. Supplied in its own enclosure 210x170x65 with IP65 protection rating.

XP95 Series Detectors



55000-620

Low-profile analogue optical smoke detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote

output capable of supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.



Cert. No. 010q



G294028

55000-420

Low-profile analogue heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped

with status signalling LED and a remote output capable of supplying 17 mA maximum. Incorporated anti-removal device.



Cert. No. 010p



G294029

55000-401

Low-profile analogue high temperature detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped

with status signalling LEDs and a remote output capable of supplying 17mA maximum. Incorporated anti-removal device.



Cert. No. 010m

55000-885

Low-profile analogue optical smoke and heat detector in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a

remote output capable of supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Certification: EN54/pt7 and pt5 VDS.



Cert. No. 010m



G299080

38531-771

Spare address card with plastic tag. In the part that protrudes it is possible to

indicate the detector number. To be requested in the case of change/loss.

45681-284

Addressable base with built-in isolator in white thermoplastic with bayonet lock for XP95 and

Discovery detectors. Signalling LED indicates isolator activation.

Discovery series detectors



58000-600

Low-profile optical smoke detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of supplying

17mA maximum. Operating voltage 14-28 Vdc (polarity-insensitive). Apollo Discovery protocol. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.



58000-400

Low-profile heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable

base. Equipped with status signalling LEDs and a remote output capable of supplying 17mA maximum. Anti-removal device.



58000-700

Low-profile optical smoke and heat detector with on-board intelligence in white enclosure. Provides a bayonet fitting for connection to an addressable base. Equipped with status signalling LEDs and a remote output capable of

supplying 17mA maximum. Detachable optical chamber for easy cleaning and maintenance. Incorporated anti-removal device.



58000-300

Carbon monoxide detector for the sensing of smouldering fires. This CO detector responds

to certain types of fire only and does not detect the presence of smoke or flames.



58000-305

Carbon monoxide detector for the sensing of smouldering fires (CO detection) and the detection of flames (heat sensing). Ideal for hotel

rooms where steam from bathrooms may cause optical smoke detectors to trigger false alarms.



45681-210

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. Equipped with 4 screw terminals for

quick, reliable installation. Base supplied with address card.



45681-242

Addressable relay base in white thermoplastic with bayonet lock for XP95 and Discovery detectors. The on-board relay provides a NC/

NO contact configurable from the control panel. Base supplied with address card.

