

Interactive optical smoke detector with isolator

- *Standard EN54-7, EN54-17, EN54-18.*
- *Security addressing*
- *CE0333 certified according to CPD*

The Optical smoke detector analyzes an atmosphere by reflection of a light on the particles of smoke according to **TYNDALL effect**. It detects especially the **cold and visible smoke particles** ($0,3\mu\text{m}$ to $2\mu\text{m}$) produced in the early stages of a fire. The threshold of response of alarm is regulated to obtain the value $m=0,2\text{db/m}\pm 0,03$ according to standard **EN54-7**.

OA12 includes a developed technology (**microprocessors, smd components**) which means precision and high reliability. A specific head detection fixed **by a single ceiling base**.

OA12 is dedicated to **interactive fire detection panels**.

The smoke detector **OA12** is designed to be installed under flat ceiling with heights ranging between **2,5 m and 12 m** and this, in healthy and more or less ventilated buildings.

The maximum supervised surface is **80m² by detector**; however it is preferable to refer to the local rules of installation recommended in particular when the characteristics of the installation differ **from those stated above**. **Eight levels of sensitivity** are available while programming the fire detection panel (from 0,1dB/m to 0,35 dB/m).

OA12 has an isolator circuit embedded enabling to protect the loop lost in case of short circuit.

OA12 is conform with the **EN-17 for the short circuit isolator**



Main characteristics

- Photoelectric scattering (Tyndall effect)
- **EN54-7** for the smoke optic detection
- 1 remote indicator output
- Cable section max 2,5mm²
- **8 levels sensitivity** setting (0,1 dB/m to 0,35 dB/m)
- Embedded circuit short-circuit isolator (**EN54-17**)
- **Constant sensitivity** thanks to auto correction

Power supply specification

Main supply voltage	12Vdc to 28 Vdc
Nominal main supply voltage	24 Vdc
Quiescent current (24 Vdc)	140µA with base isolator closed 500µA with base isolator open
Alarm current (24 Vdc)	5mA ± 1mA (15mA if equipped with optional R05)
Fault current (24 Vdc)	140µA
Remote alarm indicator output	Individual command: 5mA ± 1mA

Mechanical characteristics

Unit weight	130g
Unit dimensions (in mm)	H:55 D:104
Unit row material	ABS
Unit colour	White
IP rating	IP32
Mounting mode	Base
Fixing	- distance between centres: 50mm to 60mm - under ceiling: 2 screws Ø 4

Climatic characteristics

Operating temperature	-30°C to +60°C
Storage temperature	+10°C to +50°C
Operating relative humidity	≤ 93%
Storage relative humidity	≤ 85%