



PANASONIC

Panasonic 4401I analogue optical smoke detector with short-circuit isolator

Product code 41282 · Fire alarm systems > Field devices > Detectors

Analogue addressable optical smoke detector with a built-in short-circuit isolator. AI-based fire decision and a learning function reduce false alarms.

- Optical smoke detector in a low-profile housing (Ø 102 × 34 mm)
- Built-in short-circuit isolator without its own address
- Learning function selects the alarm algorithm that suits the room
- Installation date stored in memory and automatic service signal
- Supports automatic addressing via EBLWin
- Approved to EN 54-7 and EN 54-17 and by VdS (G220004)



Product description

Panasonic 4401I is a white analogue addressable optical smoke detector with a built-in short-circuit isolator. The detector is intended for dry indoor premises and works only in Advanced mode; it is not backward compatible with older detector types.

The smoke chamber contains an infrared LED and a photodiode, and smoke enters the chamber through an insect mesh and an optical labyrinth. The design improves smoke inflow and makes vapour condense on the outer surface of the housing, which reduces false alarms. The fire decision is based on artificial intelligence, which adjusts sensitivity and delay according to changes in smoke. The learning function monitors local conditions for about a month and, if needed, switches from the normal algorithm to the smoke/steam or clean algorithm; for known room types, the algorithm can be set manually in EBLWin. The detector compensates for contamination and gives a service signal when it needs to be replaced. It stores its installation date, so the control panel can also report an ageing detector.

The built-in short-circuit isolator divides the COM loop into segments, so a short circuit disables only the faulty segment. Two red LEDs flash in a fire alarm, and a green LED indicates polling, test mode or isolator activation.

Installation

- Fitted in mounting base 4412F, 4412S, 4412J or base sounder 4479; not compatible with bases 3312x or 3379
- Automatic addressing with EBLWin or manually with tool 4414/4414E (address 001-253)
- Can be locked to 4412 bases with a hex socket screw (ordered separately)
- Remote indicator 4418 is connected via the mounting base

Technical data

Product code	41282
Manufacturer	Panasonic
Product group	Fire alarm systems > Field devices > Detectors
Colour	White (Munsell 10Y9/0.5)
Weight	75 g
Dimensions	Ø 102 × 34 mm
LED	2 red (alarm), 1 green (status)
Operating temperature	-10...+50 °C
EN 54 approval	EN 54-7, EN 54-17
VdS approval	G220004
CPR	0786-CPR-21673
Storage temperature	-20...+70 °C
Humidity	Max. 96% RH, non-condensing
Material	Polycarbonate blend
IP rating	IP41
Operating voltage	12–30 V DC (nominal 24 V DC)
Current consumption (quiescent)	0.3 mA (+0.025 mA with green polling LED)
Current consumption (alarm)	1.3 mA
Address range	001–253
Short-circuit isolator	Built-in
Compatibility	Advanced mode (EBL512 G3, EBLOne)
Mounting	In base 4412F, 4412S, 4412J or base sounder 4479
Standards	EN 61000-6-3, EN 50130-4, EN IEC 63000 (RoHS)

Documents

The manufacturer's original documents can be downloaded from the product page (QR code at the top of this sheet).

Technical datasheet: 4401I analogue smoke detector with short-circuit isolator

Certificate: EU declaration of conformity, no. ESSC-F00030-02

Certificate: Declaration of performance (DoP), no. 0786-CPR-21673 (document ID ESSC-FP0030-3)

Certificate: CPR certificate of constancy of performance, no. 0786-CPR-21673

Certificate: VdS approval, no. G 220004

Request a quote or ask for more information

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Up-to-date information and documents: pap.fi/en/tuote/panasonic-4401i-optinen-savuilmais-in-oe/