FHSD8100-99

LaserSense 100 High Sensitivity Smoke Detector

Description

LaserSense 100 is designed to provide very high sensitivity smoke detection in a small package.

ClassiFire Perceptive Artificial Intelligence ensures that the detector operates at optimum sensitivity for the protected environment, without the need for complex setup. This means the product will configure itself to provide high sensitivity in a computer room or reduced sensitivity in a smoky area.

The detector is designed to fit into a Docking Station. All sampling pipes and cables are connected to the Docking Station as a first fix operation leaving the detector to be fitted during the final commissioning phase if required. This ensures that detectors are less likely to be damaged during the installation.

Upgradable volt-free Fire and Fault relay outputs are available for remote monitoring by local fire detection or BMS systems.



Typical Applications

- Data storage units
- Prison cells
- Plant rooms
- Air conditioning units
- Equipment racks
- Computer rooms
- Air duct protection
- Heritage property protection
- Critical equipment
- Anti-smoking enforcement
- Motor rooms

Options Available

- Addressable Protocol Interface Cards APIC™ available for Ziton protocol
- Command Module available for central monitoring and display
- SenseNet compatible - up to 127 detectors per loop
- Remote Display units available
- Suitable for MatrixScan, a patented software system which provides virtual addressable location detection - e.g. 10 physical detectors would provide up to 45 unique addressable locations.

Details

- Small low cost aspirating smoke detector for easy and discreet installation
- High sensitivity provided by laser based forward light scatter for reliable early warning
- Single sampling pipe up to 100m in length (still air)
- Unique ClassiFire® Perceptive Artificial Intelligence system that dynamically adjusts the detector's operating parameters, allowing for day to day changes in the protected environment and dust separation system contamination
- Unwanted alarms from dust are avoided using patented Dual Technology LDD 3D3 Laser Dust Discrimination and elimination system
- RS485 communications built in as standard for networking and remote communications
- CPR and VdS approved

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Technical specifications

General

Status indication	LED
Alarm levels	4 (Aux, Pre-alarm, Alarm and Alarm 2)

Electrical

Operating voltage	21.6 to 26.4 VDC
Current consumption	400 mA

Detection

Detection principle	Laser light scattering mass detection and particle evaluation
Range	0.0015% to 25%
Particle sensitivity range	0.003µ to 10µ

Sampling pipe

Length	100 m maximum run (50 m in moving air)
Quantity sampling holes	up to 20 holes
Inlet quantity	2
Inlet size	27 mm OD
Exhaust	1 (optional)

Input

Input quantity	Optional input and relay card

Output

Output quantity	2, Alarm (n/o) and Fault (n/c) Optional input and relay card
Output type and rating	500 mA @30 V

Physical

Physical dimensions	300 x 220 x 85 mm (W x H x D)
Net weight	3.8 kg
Colour	Cream
Mounting type	Surface mount
Cable entries	2 x M20
Material (body)	Sheet steel enclosure

Environmental

Operating temperature	-10 to +60°C(EN54-20)
Relative humidity	0 to 90% noncondensing
Environment	Indoor
IP rating	IP40

Regulatory

Certification	EN54-20

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Last updated on 23 September 2026 - 15:49