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

Electrical

Operating voltage	21.6 to 26.4 VDC
Current consumption	400 mA

Detection

Detection principle	Laser light scattering mass detection and particle evaluation
Particle sensitivity range	0.003μ to 10μ
Detection principle	Laser light scattering mass detection and particle evaluation
Particle sensitivity range	0.003μ to 10μ
Measurement range (%Obs/m)	0.0015% to 25%
Alarm levels	4 (Aux, Pre-alarm, Alarm and Alarm 2)

Physical

Physical dimensions	300 x 220 x 85 mm (W x H x D)
Net weight	3.8 kg
Colour	Cream
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
Operating temperature	-10ºC to +60ºC (EN54-20)
Relative humidity	0 to 90% RH (non condensing)

Standards & regulation

Certification	EN54-20

Supply

Voltage	21.6 to 26.4 Vdc
Current	400 mA

Mechanical

Size	300mm (W) x 220mm (H) x 85mm (D)
Weight	3.8Kg
Colour	Cream
Material	Sheet steel enclosure
Cable entries	2 x M20

Sampling pipework

Inlets	2
Lenght	100m maximum run (50m in moving air)
Diameter	27mm OD
Holes	up to 20 holes
Exhaust	1 (optional)

Outputs

Standard	2 - Alarm (n/o) and Fault (n/c)
Rating	500mA @ 30V
Expansion	Optional input and relay card

User interface

Indicators	LED

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