

# FHSD8015-99

## LaserSense 10 High Sensitivity Smoke Detector

### Description

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The LaserSense 10 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

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- 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

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- Addressable Protocol Interface Cards APIC™ available
- Relay expansion card



### Details

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- Ultra 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 50m 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
- CPR approved

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### Technical specifications

#### General

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

#### Electrical

Operating voltage	21.6 to 26.4 VDC
Current consumption	250 mA

#### Detection

Detection principle	Laser light scattering mass detection and particle evaluation
Range	0.3 to 25 %Obs/m (Sensitivity)
Particle sensitivity range	0.003 $\mu$ to 10 $\mu$

#### Sampling pipe

Length	50 m maximum run (25 m in moving air)
Quantity sampling holes	up to 2 holes, Class A (high sensitivity) up to 4 holes, Class B (enhanced sensitivity) up to 10 holes, Class C (normal sensitivity)
Inlet quantity	1
Inlet size	27 mm OD
Exhaust	1 (optional)

#### Output

Output quantity	2, 1x Alarm (n/o), 1x Fault (n/c) Optional input and relay card
Output type and rating	500 mA @30 V

#### Physical

Physical dimensions	145 x 220 x 85 mm (W x H x D)
Net weight	1.7 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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#### Networking

SenseNET (RS-485)	Not supported
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#### Compatible products

Category	Reference	Description
Detection device	FHSD8025-09	LaserSense 25 High Sensitivity Smoke Detector - Spanish
Detection device	FHSD8100-09	LaserSense 100 High Sensitivity Smoke Detector - Spanish
Detection device	FHSD8200-09	LaserSense HSSD2 High Sensitivity Smoke Detector - Spanish
Detection device	FHSD8210-09	LaserSense HSSD2 High Sensitivity Smoke Detector - Minimum display version - Spanish



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Last updated on 28 February 2024 - 20:31