Product data sheet

United Technologies
Climate | Controls | Security

FHSD8220-99

LaserSense HSSD2 High Sensitivity Smoke Detector - with integrated Command Module

Description

LaserSense HSSD2 is designed to provide very high sensitivity smoke detection, ensuring the very earliest warning of incipient fire with minimum rate of nuisance alarms.

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.

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

Integrated Command Module for central monitoring and display of up to 126 detectors.

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
- 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

- High sensitivity provided by laser based forward light scatter for reliable early warning
- Combined sampling pipe up to 200m 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

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Technical specifications

Electrical

Operating voltage	21.6 to 26.4 VDC
Current consumption	450 mA at fan speed 8

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	427 x 372 x 95 mm (W x H x D)
Net weight	5.2 kg
Colour	Cream
Cable entries	6 x M20
Material	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	450 mA at fan speed 8

Mechanical

Size	427mm (W) x 372mm (H) x 95mm (D)
Weight	5.2Kg
Colour	Cream
Material	Sheet steel enclosure
Cable entries	6 x M20

Sampling pipework

Inlets	4
Lenght	100m maximum single run (50m in moving air)
	200m Combined maximum
Diameter	27mm OD
Holes	up to 100 holes
Exhaust	1 (optional)

Inputs

Standard	3 - Progammable

Outputs

Standard	5 - Pre-Alarm, Alarm, Alarm2, Aux Alarm (n/o) and Fault (n/c)
Rating	500mA @ 30V

User interface

Indicators	LED and LCD
Navigation	Keypad

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