#### **Product data sheet**



# FHSD8015-99

## LaserSense 10 High Sensitivity Smoke Detector

#### **Description**

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**

- Data storage units
- •2Prison cells
- Plant rooms
- ? Air conditioning units
- Equipment racks
- 2 Computer rooms
- ? Air duct protection
- PHeritage property protection
- \*\*Critical equipment
- 2 Anti-smoking enforcement
- 2 Motor rooms

### **Options Available**

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Addressable Protocol Interface Cards APIC™ available

Belay expansion card



#### **Details**

- 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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# LaserSense 10 High Sensitivity Smoke Detector

### **Technical specifications**

| Operating voltage   | 21.6 to 26.4 VDC   |
|---|--|
| Current consumption   | 250 mA   |
| · ·   |  |
| Detection   |  |
| Detection principle   | Laser light scattering mass detection and particle evaluation  |
| Particle sensitivity range  | <u> </u>   |
| Detection principle   | Laser light scattering mass detection and  |
| · · · · · · · · · · · · · · · · · · ·   | particle evaluation  |
| Particle sensitivity range  | e 0.003µ to 10µ  |
| Sensitivity range   | 0.3% to 25%  |
| (%Obs/m)  |  |
| Alarm levels  | 4 (Aux, Pre-alarm, Alarm and Alarm 2)  |
| Physical  |  |
| Physical dimensions   | 145 x 220 x 85 mm (W x H x D)  |
| Net weight  | 1.7 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)   |
| Operating temperature   | -10°C to +60°C (EN54-20)<br>0 to 90% RH (non condensing)   |
|   | 0 to 90% RH (non condensing)   |
| Operating temperature Relative humidity  Standards & regula   | 0 to 90% RH (non condensing)   |
| Operating temperature Relative humidity   | 0 to 90% RH (non condensing)   |
| Operating temperature Relative humidity  Standards & regula Certification  Supply   | 0 to 90% RH (non condensing)   |
| Operating temperature Relative humidity  Standards & regula Certification  Supply Voltage                                 | 0 to 90% RH (non condensing)  tion  EN54-20  |
| Operating temperature Relative humidity  Standards & regula Certification  Supply Voltage Current                         | 0 to 90% RH (non condensing)  tion  EN54-20  21.6 to 26.4 Vdc  |
| Operating temperature Relative humidity  Standards & regula Certification   | 0 to 90% RH (non condensing)  tion  EN54-20  21.6 to 26.4 Vdc  |
| Operating temperature Relative humidity  Standards & regula Certification  Supply Voltage Current  Mechanical             | 0 to 90% RH (non condensing)  Ition  EN54-20  21.6 to 26.4 Vdc  250 mA                                       |
| Operating temperature Relative humidity  Standards & regula Certification  Supply Voltage Current  Mechanical Size        | 0 to 90% RH (non condensing)  ttion  EN54-20  21.6 to 26.4 Vdc 250 mA  145mm (W) x 220mm (H) x 85mm (D)      |
| Operating temperature Relative humidity  Standards & regula Certification  Supply Voltage Current  Mechanical Size Weight | 0 to 90% RH (non condensing)  tion  EN54-20  21.6 to 26.4 Vdc 250 mA  145mm (W) x 220mm (H) x 85mm (D) 1.7Kg |

| Standard          | 2 - Alarm (n/o) and Fault (n/c) |
|-------------------|---------------------------------|
| Rating            | 500mA @ 30V                     |
| Expansion         | Optional input and relay card   |
| User interface    |                                 |
| Indicators        | LED                             |
| Networking        |                                 |
| SenseNET (RS-485) | Not supported                   |
|                   |                                 |



As a company of innovation, UTC Fire & Security reserves the right to change product specifications without notice. For the latest product specifications, visit UTC Fire & Security online or contact your sales representative.

50m maximum run (25m in moving air)

27mm OD

1 (optional)



Sampling pipework

Amount of Class A holes up to 2 holes

Amount of Class B holes up to 4 holes

Amount of Class C holes up to 10 holes

Inlets

Lenght

Diameter

Exhaust

(high sensitivity)

(enhanced sensitivity)

(normal sensitivity)