

### **Key Features**

- Lightweight design for easy one-man installation.
- Very high sensitivity provided by laser based forward light scatter for reliable incipient fire detection.
- External particles filter for ease of maintenance... no need to declassify area for routine maintenance.
- Unique ClassiFire® Perceptive Artificial Intelligence system dynamically adjusts the detector's operating parameters to allow for day-to-day changes in protected environment and dust filtration contamination. Consistent protection guaranteed.
- Unwanted alarms from dust are avoided using patented dual technology 3D<sup>3</sup>
  Laser Dust Discrimination and filtration system.
- RS485 communications built in as standard for networking and remote communications.

## **Description**

Stratos-Ex is designed to provide reliable very high sensitivity smoke detection for hazardous areas in a small lightweight package.

ClassiFire Perceptive Artificial Intelligence ensures that the detector operates at optimum sensitivity for the protected environment without the need for complicated setup. This means the detector will configure itself to provide and maintain high sensitivity in a clean room or reduced sensitivity in a more smoky environment.

The detector is supplied in a cast aluminium enclosure. All sampling pipes and cables can be connected to the enclosure as a first fix operation, leaving the internals to be fitted during the final commissioning phase.

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

## **Applications & Acceptance**

Stratos detectors have been successfully applied in many different types of application in tens of thousands of sites worldwide.

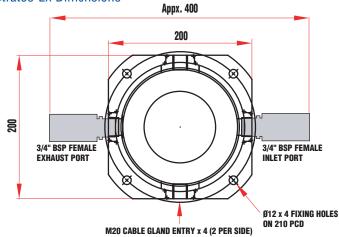
### **Options Available**

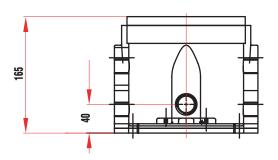
- Addressable Protocol Interface Cards APIC<sup>™</sup> available for several industry standard signaling protocols.
- Command Module used for remote monitoring display and set-up.
- SenseNET compatible up to 127 Stratos-Ex detectors per network loop.
- Remote Display units available (not suitable for installation inside hazardous environment).

#### **Approvals**

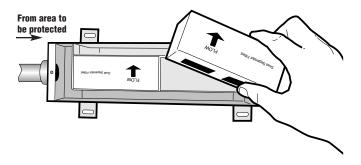
 ATEX rated EEx d IIB + H<sup>2</sup> T3. Equipment group 2 (zones 1, 2 and 3). Group gases A and B + Hydrogen.

### Stratos-Ex Dimensions





# Filter Replacement



ORDERING INFORMATION		
Part No.	Description	
30731	Stratos-Ex Detector	
30732	Stratos-Ex Detector (stainless steel version)	
30072	Replacement External Filter Cartridge	
30730	External Filter Assembly	
30240	Setup and servicing Software (free of charge)	
30419	Serial PC Lead	
30804	SenseNET 485/232 PC Interface	
30821	PS25 Power Supply	
30436	Relay Input PCB	

# **Specification Stratos-Ex**

Supply Voltage	21.6V - 26.4V DC PSU Type: conforming to EN 54-4 Electrical safety complies with BS EN 610190-1
Current consumption	1.1A @ 24V DC
Size(mm) exc. cable glands	400W x 200H x 165D inc. flame arrestors
Weight	8.5kg
Enclosure material	Aluminium alloy
Operating temperature range	-10 to + 60°C
Operating humidity range	0 - 90% non-condensing
Measurement range (%Obs/m)	0.0015% to 25%
Display LEDs	Fire, Fault, OK
Detection principle	Laser light scattering mass detection and particle evaluation
Particle sensitivity range	0.0003μm to 10μm
Dust discrimination principle	3D³ Laser Dust Discrimination (LDD)
Recommended max. sampling pipe length	25m moving air 50m still air
Sampling pipe diameter	<sup>3</sup> /4" nominal bore (27mm O/D)
Recommended no. sampling holes	10
Alarm levels	4 (Aux, Pre-alarm, Fire 1 and Fire 2)
Laser chamber service intervals	Greater than 10 years (dependent on environment)
Laser lifetime (MTTF)	Greater than 1000 years
Programming	Command Module or PC via RS232/RS485
Network data bus	RS485
Maximum total data bus length	1.2 km
IP rating	IP65
Sampling pipe inlets	1
Exhaust air pipe outlets	1
Cable entries	4 x M20
Details (Threads)	3/4" NPT female inlet and exhaust

# **APPLICATIONS**

- Oil platforms
- Pharmaceutical areas
- Plant rooms
- Equipment racks
- Production areas
- Hazardous areas

- Critical equipment
- Marine environments
- Motor rooms
- LNG plants
- Battery rooms
- Petrochemical





Shortform data sheet Stratos-Ex Issue 4

Quality system cert. no. 404 Assessed to ISO 9001:2000