

## Orbis – Optical Smoke Detector

### Features

- Responds well to slow-burning, smouldering fires
- Good performance in both black and white smoke
- Transient rejection algorithms reduce false alarms
- Automatic drift compensation with DirtAlert, a yellow flashing LED, to easily identify dirty detectors
- Red flashing LED at StartUp confirms the device is operating. SensAlert, yellow flashing LED, indicates faulty operation
- FasTest takes just four seconds to test and confirm detectors are functioning correctly
- DustDefy system prevents dust ingress while maintaining airflow

### Description

The Orbis Optical Smoke Detector operates on the well established light scatter principle. The sensing technology used is radically different from previous optical detectors and significantly reduces false alarms.

The remarkable optical design of the Orbis Optical Smoke Detector allows it to respond to a wide spectrum of fires. The sensing chamber of the Orbis Optical Smoke Detector contains an optical sensor which measures back-scattered light as well as the more usual forward scattered light. As a result sensitivity to black smoke is greatly improved. The detector is calibrated so that Orbis is highly reliable in detecting fires but is much less likely to generate false alarms than ionisation smoke detectors.

The stability of the detectors high reliability and low false alarm rate is further increased by the use of algorithms to decide when the detector should change to the alarm state. This removes the likelihood of a detector producing an alarm as a result of smoke from smoking materials or from another non-fire source. The sensing chamber has also been designed to keep out dust and other airborne contaminants.

For further information refer Product Guide, MAN1507.



Optical Smoke Detector

### Specifications

Operating Voltage	8.5 to 33 VDC
Quiescent current	65µA at 24 VDC
Alarm current	40mA at 24 VDC
Remote output	1.2kΩ to -ve supply
Dimensions	100mm Dia x 46mm H inc base
Operating temperature	-40 °C to +70 °C (no icing)
Relative humidity.	0 to 98% (non condensing)
IP rating	IP23D (indoor use)
Weight	75 grams (135g inc base)

### Item Numbers

	LPCB (EN54-7)	SAI Global (AS7240-7)	Activfire (AS7240-7)
Orbis Optical Smoke Detector	ORB-OP-12001-AMP	4106-1051	201-0512
Orbis Optical Smoke Detector c/w Flashing LED	ORB-OP-12003-AMP	4106-1059	

