

Fire detection and evacuation solutions that save lives.

# Orbis – Optical Marine 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 Marine 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 Marine Optical Smoke Detector allows it to respond to a wide spectrum of fires. The sensing chamber of the Orbis Marine 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.

A **Halma** company



Marine Optical Smoke Detector

## Specifications

<b>Operating Voltage</b>	8.5 to 33 VDC
<b>Quiescent current</b>	65µA at 24 VDC
<b>Alarm current</b>	40mA at 24 VDC
<b>Remote output</b>	1.2kΩ to -ve supply
<b>Dimensions</b>	100mm Dia x 46mm H inc base
<b>Operating temperature</b>	-40°C to +70°C (no icing)
<b>Relative humidity.</b>	0 to 98% (non condensing)
<b>IP rating</b>	IP23D
<b>Weight</b>	75 grams (135g inc base)
<b>Approvals</b>	Lloyd's Registry, American Bureau Shipping, Korean Register & China Classification Society.

## Item Numbers

Australia	
<b>201-0654</b>	Orbis Marine Optical Smoke Detector (AS)
International	
<b>ORB-OP-42001-MAR</b>	Orbis Marine Optical Smoke Detector
<b>ORB-OP-42003-MAR</b>	Orbis Marine Optical Smoke Detector with Flashing LED