

PROJECT :	HAZARDS ROOM/SHELTER PROTECTION		
CUSTOMER :	/		
PO NO. / DT. :	/		
PRODUCT NAME :	OPTICAL SMOKE DETECTOR		
PART NO. :	/		
PRODUCT CODE :	/		
DOCUMENT NAME :	SMOKE DETECTOR DATA SHEET		
DOC NO.:	AFS/CAGS/1.0.2	REV.NO. :	0
DOC DT.:	12/10/2023	REV.DT. :	0

Orbis

Optical Smoke Detector

Technical Data



BOSEC



Note: Not all standards and approvals apply to all Part Numbers,

Product overview

Product	Optical Smoke Detector
Part No.	ORB-OP-12001-APO
Product	Optical Smoke Detector with flashing LED
Part No.	ORB-OP-12003-APO

Product information

Optical smoke detectors have always been recognised as good detectors for general use. They are regarded as particularly suitable for smoldering fires and escape routes.

The performance of Orbis optical detectors is good with black as well as with white smoke. In this respect Orbis detectors are different from traditional optical smoke detectors which perform far better in white smoke than in black.

Orbis Optical Smoke Detectors are also designed to reduce significantly the incidence of false alarms through over-sensitivity to transient phenomena.

Orbis Optical Smoke Detectors are recommended for use as general purpose smoke detectors for early warning of fires in most areas.

- Improved sensitivity to black smoke
- Compensation for build-up of dirt
- Extra confirmation of smoke before an alarm signal is given

All data is supplied subject to change without notice. Specifications are typical at 24 V, 25°C and 50% RH unless otherwise stated.

<i>Detection principle</i>	Photo-electric detection of light scattered by smoke particles over a wide range of angles.	
<i>Sampling frequency</i>	Once every four seconds	
<i>Operating voltage</i>	8.5 V dc to 33 V dc	
<i>Supply Wiring</i>	Two wire supply, polarity sensitive	
<i>Maximum polarity reversal</i>	200 ms	
<i>Power up time</i>	< 20 seconds	
<i>Minimum 'detector active' voltage</i>	6 V	
<i>Power-up surge current at 24 V</i>	95 µA	
<i>Average quiescent current at 24 V</i>	95 µA	
<i>Alarm current</i>	12 V	20 mA
	24V	40 mA
<i>Alarm load</i>	600 Ω	
<i>Holding voltage</i>	5V-33V	
<i>Minimum holding current</i>	8 mA	
<i>Minimum voltage to light alarm LED</i>	5 V	
<i>Alarm reset voltage</i>	< 1 V	
<i>Alarm reset time</i>	One second	
<i>Alarm indicator</i>	Integral indicator with 360° visibility	
<i>Remote output LED (-) characteristic</i>	1.2 kΩ connected to negative supply	
<i>Operating and storage temperature</i>	-40°C to +70°C	
<i>Humidity (no condensation or icing)</i>	0% to 98% RH	
<i>Effect of atmospheric pressure on optical sensor</i>	None	
<i>Effect of windspeed</i>	None	
<i>IP Rating</i>	IP44	
<i>Standards and approvals</i>	EN54-7, CPR, LPCB, VdS, BOSEC, SBSC, FG, CSIRO	
<i>Dimensions</i>	97 mm diameter x 31 mm height	
<i>Weight</i>	75 g	
<i>Materials</i>	Housing: White flame retardant polycarbonate Terminals: Tin plated stainless steel	
<i>Compliance*</i>		
<i>Part No. ORB-OP-12001-APO - CPR, LPCB, VdS, BOSEC, SBSC, FG Part No. ORB-OP-12003-APO - CPR, LPCB, BOSEC, FG, CSIRO</i>		

All information in this document is given in good faith but Apollo Fire Detectors Ltd cannot be held responsible for any omissions errors. The company reserves the right to change the specifications of products at any time and without prior notice.



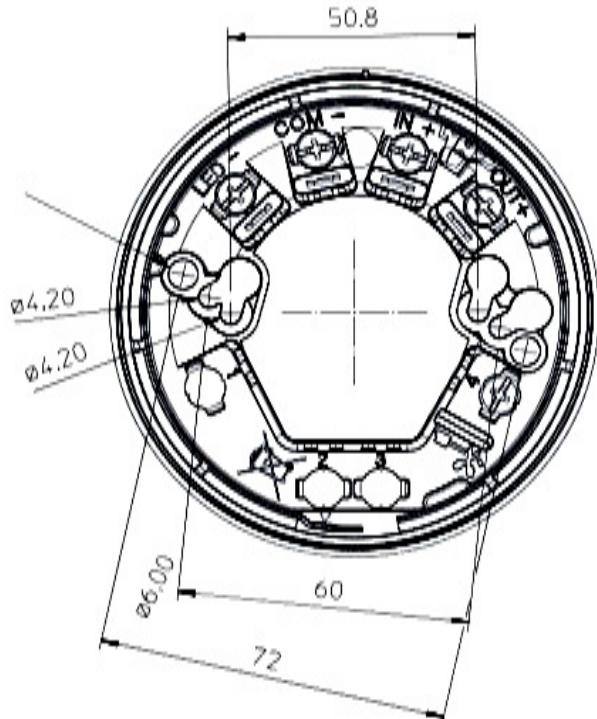
C : +91 9172036887
M: info@jimreeves.in

FIXED DSPA FIRE SUPPRESSION SYSTEM

PROJECT :	HAZARDS ROOM/SHELTER PROTECTION		
CUSTOMER :	/		
PO NO. / DT. :	/		
PRODUCT NAME :	OPTICAL SMOKE DETECTOR		
PART NO. :	/		
PRODUCT CODE :	/		
DOCUMENT NAME :	SMOKE DETECTOR DATA SHEET		
DOC NO.:	AFS/CAGS/1.0.2	REV.NO. :	0
DOC DT.:	12/10/2023	REV.DT. :	0



FIXING DETAILS



MOUNTING BASE
TO BE ORDERED SEPERATELY

