

G2000 Ambient Oil Mist Detector

Line-of-Sight Opacity Meter for Machinery Spaces

Monitoring of Dust, Smoke & Oil Mist

Perfecting Sensible Technology



Cost-Effective Protection



The G2000 Detects Oil Mist in Open Spaces

The G2000 Ambient Oil Mist Detector is a line-of-sight opacity meter that measures the opacity of the air in open spaces. It reacts to oil mist, smoke, dust, and other obstructions.

The system sends an infrared beam through the monitored section. If the beam is interrupted, the amount of light that is sent to the transceiver is reduced.

The monitoring unit displays the opacity of the air in percent. The alarms will be activated if the opacity exceeds the preset limits.

Where to Install the System

The G2000 Ambient Oil Mist Detector is usually installed in engine rooms, pump rooms, and other rooms with hydraulic installations or oil systems under pressure.

The detection of oil mist is especially relevant above hydraulic power packs and hydraulic aggregate pumps but also in connection with high-pressure fuel lines.



G2000 Optic Mini Head with Fiber Optic Cable

For Hydraulic Installations and Fuel Lines



Key Features

- Early oil mist alarm
- Cost-effective protection
- Compliant with inspection programs, such as SIRE
- Satisfy vetting inspectors
- Large area coverage per unit
- Integrate the output signal into your on-board alarm system
- Two freely configurable alarm relays
- Lens cleaning alarm and oil mist alarm
- Reliable result
- Durable and robust design
- Easy to configure, operate, and maintain
- Easy cleaning of open lenses
- Worldwide customer support via service partners



Prevent Fire Hazards by Installing the G2000

Atmospheric oil mist can be formed in one of two ways. First, if oil leaks in pressurized oil lines produce a very fine atomized spray. Second, evaporating oil on a hot surface produces what is known as blue smoke. These tiny droplets of oil in the air have a particularly low ignition temperature or can be sparked off by other sources.

Because of the fire hazard, early alarms on the formation of oil mist are important. This small safety investment also yields great benefits since the equipment is often required according to the Ship Inspection Report Programme (SIRE).

The G2000 is ideal for applications where an accurate response to oil mist is required in unattended machinery spaces.

The Ambient Oil Mist Detector Covers a Large Area

The line-of-sight measurement principle has the decisive advantage of covering a larger area than single-point extractive-sampling systems. The system has a scanning distance from 3 to 9 meters.

Specifications - G2000 AOMD

Lloyd's
Register

TYPE
APPROVAL

Monitoring Unit

Power supply	Standard 210–250 V AC – 50/60 Hz – 20 VA max. — optional 105–130 V AC or 20–30 V DC
Ambient temperature	0°C – 55°C
Output signal (linearized)	4...20 mA (4 mA ≈ 100% – 20 mA ≈ 0% Opacity) max. 800 Ω or 0...10 V DC (0 V ≈ 100% – 10 V ≈ 0% Opacity) max. 10 mA
Accuracy	Better than 2% of full scale
Dimensions / weight	H×W×D: 300 × 200 × 150 mm / 5.5 kg (monitoring unit alone)
Enclosure	IP 65 Steel box

Digital Display (& Optional Remote Digital Display)

Display	0...100% opacity level (programmable)
Alarm delay	Default 5 s (programmable 0–99 s)
Relay function	2 relays, volt free, freely configurable – lens cleaning alarm and oil mist alarm – max. 250 V AC, max. 2A (NO/NC)
Power supply	22...250 V AC – 50/60 Hz or 20...300 V DC – 4 VA (only relevant if remote)
Dimensions	H×W×D: 48 × 96 × 120 mm – for panel cut-out 44.5 × 91.5 mm

Fiber-Optic Heads and Cables

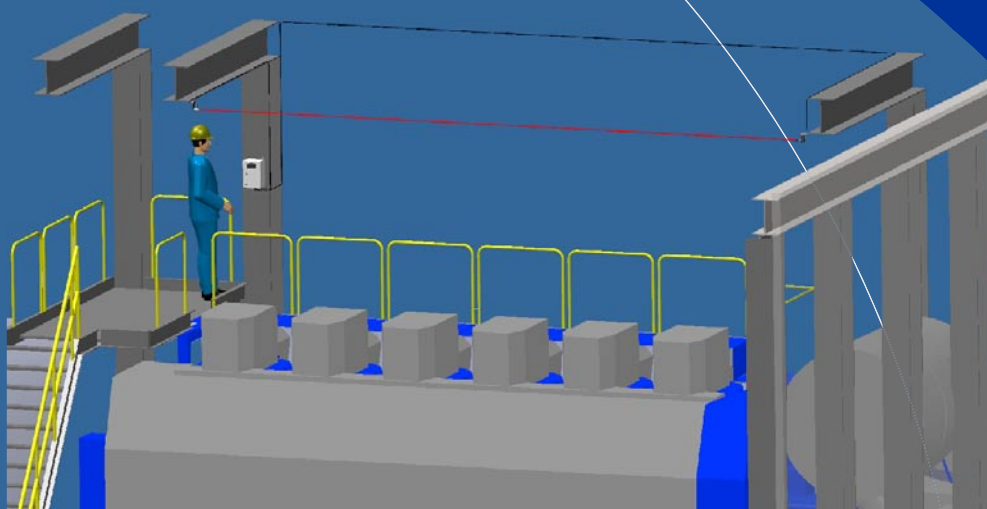
Operating temperature	0°C – 65°C
Head dimensions	H×W×D: < 120 × 100 × 60 mm
Socket	Grade A steel - welded to structure
Scanning distance	3 to 9 m — optional 1 to 3 m
Optic fibers	Glass-fiber core in stainless steel jacket - Length: 4.5 m - optional 6.0 m, 7.5 m or others

Optional Equipment

Alarm annunciator - Remote display
Visualization and data logging

Data-system integration via various busses such as RS485 and CAN

Specifications subject to changes without notice



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ISO 9001
BUREAU VERITAS
Certification

