G26

Ambient Oil Mist Detector

Oil mist detection in open spaces

Line-of-sight opacity meter for detection of oil leakages

Industry

Green Instruments

The G26 Ambient Oil Mist Detector for industrial applications is a simple and extremely reliable opacity monitor. The system uses solid green laser technology and a configurable number of detectors per monitor to cover large areas in several different locations, thus increasing safety efficiently and cost-effectively.

Detects oil mist, dust, and aerosols in open spaces

Key features:

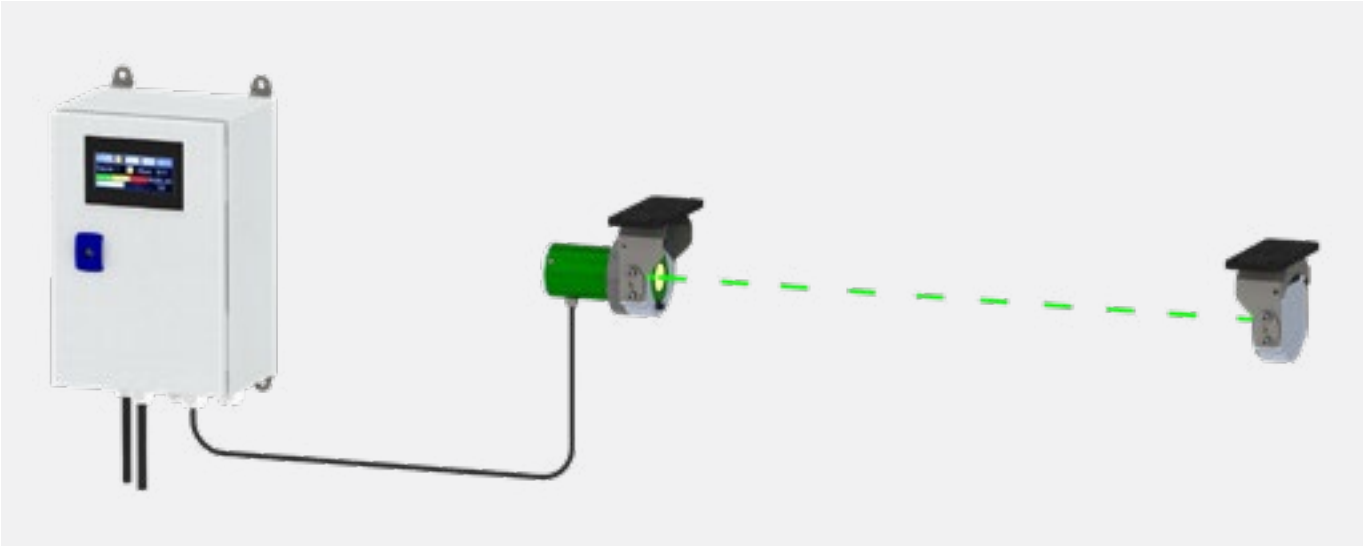
- Detects all types of oil mist
- Protects people, environment, and assets
- Simple installation - minimal footprint
- Fast and reliable detection
- Configurable number of detectors per monitor
- Displays opacity (0-100%)
- Designed for industrial applications
- Low cost of ownership – no consumable parts
- Fully scalable solution
- ATEX/IECEx version available
- 36-month warranty
- Global service and support

Certificates

The G26 Ambient Oil Mist Detector is a reliable opacity meter designed to detect all types of oil mist, dust, and aerosols. Oil mist is formed by oil droplets suspended in the air. Oil mists ignite at low temperatures and can cause severe damage to equipment and facilities. The oil mist detector acts as a safety alarm, thus helping the personnel avoid fires and thereby protecting lives, the environment, and assets. The system measures the full range of opacity (0-100%) and is designed for operating in extreme working environments in several industrial applications. This includes filter processes, ventilation, and petrochemical industries. The robust design and solid green laser technology with double-pass measurement method provides an opacity monitor with simple installation and reliability. Furthermore, the G26 Ambient Oil Mist Detector is known for its high accuracy and precision as it detects the real undiluted oil mist clouds in the atmosphere.

Fully scalable installation

The G26 has several decisive advantages compared to traditional oil mist detectors. With a scanning range of up to 15 meters, each detector can cover a larger area. The system can be configured with several detectors, which allows the system to monitor oil mist in different locations at the same time. In other words, the G26 Ambient Oil Mist Detector increases safety in all industrial applications.



Low-cost detector

The G26 Ambient Oil Mist Detector is simple and reliable because the line-of-sight measurement does not require any sampling devices. This feature minimizes system failures caused by any of the sampling devices including mechanical or contamination problems over time. With no moving parts, the detector is almost maintenance-free, requiring only occasional cleaning of the lenses and in-situ calibration.
The system has an HMI module for visualization and operation. The graphic visualization on the user-friendly home screen shows an immediate overview of the atmospheric oil mist conditions in the locations under detection. This means the personnel can take immediate action with minor oil leakages and avoid potential human and environmental catastrophes.

G26 Spot for narrow spaces

The G26 Ambient Oil Mist Detector is also available as a pre-aligned spot measurement version called G26 Spot, designed to detect oil mist in open but narrow spaces. A decisive advantage of the G26 Spot is that it is installed inside a pre-aligned box. This protects the laser beam from someone unintentionally breaking it and triggering a false alarm.

ATEX/IECEx certified version

The G26 Ambient Oil Mist Detector is available as an ATEX/IECEx certified version called G26 Ex. The G26 Ex is designed for use in hazardous areas preventing subsequent hazards such as fires and explosions. It is designed to respond to any minor or major oil mist formation – quickly and reliably. A fast response is crucial for preventing personal injury, environmental catastrophes, and for protecting goods and avoiding loss of production.

Service, support, and warranty

The G26 Ambient Oil Mist Detector is simple to install and leaves a small footprint. The detector's lens only requires occasional cleaning using a dry cloth, and calibration can easily be carried out by the personnel. Should assistance be needed, Green Instruments provides full service and support to ensure optimal operation throughout the entire product lifetime. The G26 Ambient Oil Mist Detector comes with a 36-month warranty.

Specifications - G26

CONTROL AND MONITORING UNIT (SUPPORTS 2x TRANSCEIVER)

Power supply

Standard	20 – 30 VDC - 2 A
Optional	100 – 240 VAC - 50/60 Hz - 1.4 A
Ambient temperature	0 – 55 °C

Communication

Analog output	2 x 4 - 20 mA max 500 Ω - active and linearized
Digital output	4 x alarm relays
Bus	Modbus TCP/IP
Alarm level	Alarm level is configurable Warning level is automatic set at 50 % of the alarm level
Alarm delay	Default 0 s / programmable (0 – 1800 s)

Material/enclosure

Enclosure	IP 65 steel box

Dimensions/weight:

Dimensions	300 x 200 x 150 mm
Weight	5.5 kg

TRANSCEIVER INCL. REFLECTOR AND MOUNTING BRACKETS

Measuring range	0 – 100 % opacity
Accuracy	Better than 2 % of full scale
Scanning distance	1 – 15 m
Measuring principle	Transmission double pass
Ambient temperature	0 – 55 °C
Enclosure	IP 66 steel box

Dimensions/weight:

Transceiver	170 x 116 x 140 mm / 1.8 kg (incl. mounting brackets)
Reflector	52 x 116 x 140 mm / 1.3 kg (incl. mounting brackets)

ACCESSORIES AND OPTIONAL

Optional

Purge air module for monitoring at ventilation ducts
Audit filter; Remote digital display; Audio alarm buzzer; Ex version
Visualization, recorder, and data logging

Specifications subject to changes without notice

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