

neoMONITORS LaserGas™ III Open Path HF Gas Detector





NEO Monitors new HF Open Path Gas Detector is specifically designed for service in hazardous areas. Based on our third generation LaserGasTM Technology, the entire instrument is built into compact flameproof enclosures making it fit for zone 1 and division 1 applications. The LaserGasTM III HF OP consists of a transmitter and receiver unit that is mounted diametrically opposite each other at distances up to 100 meters. The laser light is sent from the transmitter to the receiver and any HF concentration changes along the optical path from the transmitter and receiver are detected in real-time.

Customer benefits

- Compact high performance gas monitor for ambient long distance monitoring
- No cross interference from other gases
- Easy to install
- Limited need for maintenance
- Low cost of ownership
- Proven and reliable

Features

- Gen. 3 compact LaserGasTM Technology
- For operation in zone 1 (Explosion proof, Fx-d)
- Automatic health check
- Low power < 15 Watt
- No need for regular replacement of parts
- No interference from other gases
- Stable calibration, no zero drift

Applications

Open Path monitors are critical in emission monitoring across a wide range of industrial applications:

- Oil and gas industry
- Petrochemical refineries
- Chemical plants
- Metal industry
- Fence monitoring

LaserGas™ III Open Path HF Gas Detector

Technical Data



General

Type Near IR Diode Laser Spectroscopy IR-source Diode laser Class1, eye safe

Detected gas

Range Minimum 0-5 ppm*m

Path length 5-100m Self-test Continuous

Calibration Factory set, no field calibration necessary

Performance

Zero <+/- 1% of full scale
Repeatability <+/- 1% of full scale
Response time 5 sec (adjustable)

Optics

Alignment +/- 0.15 deg
Obscuration > 90%

Output signals

Standard 4-20 mA source or sink, max load impedance 500 Ohm

Options Ethernet
Fault signals Fault 1 mA
Beam Block 2 mA
Warning 3 mA

Electrical

Power Supply 24V DC range 18-32V DC

Power consumption < 15W
Cable entry M20

Temprature range

Storage temprature $-40\,^{\circ}\text{C}$ to $70\,^{\circ}\text{C}$ Operating $-40\,^{\circ}\text{C}$ to $65\,^{\circ}\text{C}$ ATEX Flameproof $-55\,^{\circ}\text{C}$ to $75\,^{\circ}\text{C}$ Humidity (operational) $100\%\,\text{RH}$

Material

Tx and Rx Stainless steel (ASTM 316)

Junction box

Dimensions / weight

Footprint/ Weight Tx or Rx Ø 125mm x 250 mm/ 5.5 Kg (12 lbs.) per Tx or Rx Footprint Junction box 250 mm x 250 mm/ 2.0 Kg (4.4 lbs. per Junction Box

Approvals

ATEX rating Tx/Rx

ATEX rating JB

CSA

Pending

Pending

Pending

Pending

Ingress IP 66/IP 67/IEC 60529

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