LaserGas™ III OP HF Gas Detector





NEO Monitors LaserGas™ III new HF Open Path Gas Detector is specifically designed for service in hazardous areas. Based on our third generation LaserGas™ Technology, the entire instrument is built into compact flameproof enclosures making it fit for zone 1 applications. The LaserGas™ III OP HF 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 to the receiver are detected in real-time.

Features

- Gen. 3 compact LaserGas[™] Technology
- For operation in zone 1 (Explosion proof, Ex-d)
- Automatic health check
- Low power < 15 Watt
- No need for regular replacement of parts
- No interference from other gases
- Factory calibrated, no zero drift
- Suitable for SIL2

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
- Fenceline monitoring

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

LaserGas™ III OP HF Gas Detector

Technical Data

Specification

Type: Near IR Diode Laser

Spectroscopy

IR-source: Diode laser Class1 M,

eye safe

HF Detected gas:

Minimum 0-5 ppm*m Range:

Path lenght: 5-100 m Self-test: Continuous

Calibration: Factory set, no field

calibration necessary

<+/- 1% of full scale Zero:

<+/- 1% of full scale Repeatability:

Response time: 5 sec (adjustable)

Environmental conditions

-55 °C to 75 °C Storage temprature: Operating: -40 °C to 65 °C Humidity (operational): 100% RH

Input/output

Standard: 4-20 mA source or sink.

max load impedance

500 Ohm

Options: Ethernet Fault 1mA Fault signals:

Beam Block 2 mA

Warning 3 mA

Rating

24V DC range 18-32V Power Supply:

Power consumption: < 15W

Safety

Class 1 according to Laser class:

IEC 60825-1, eye safe

II 2 G Ex d [op is] IIC T6

II 2 D Ex tb IIIC T88 °C

IP66/IP67 IEC 60529

Suitable for use in SIL2

systems

Stainless steel

(ASTM 316)

CE: Certified

EMC: Conformant with

directive 2014/30/EU

Approvals

IECEx/ATEX zone 1:

(TU/RU)

Ingress:

SIL:

Materials

TU and RU:

Optics

Alignment: +/- 0.15 deg

> 90% Obscuration:

Dimensions / weight

Footprint/weight: Ø 125mm x 250 mm/

5.5 Kg (12 lbs.) per TU

or RU

Optional junction box (technical data)

Junction box: GRP / aluminum

Footprint Junction box: 250 mm x 250 mm/ 2.0

Kg (4.4 lbs. per Junction

Box)

ATEX rating: II 2 G Ex e I IC T4/T5/

Т6

* NEO Monitors reserve the right to change specifications without prior notice

Your local distributor:

