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 Applications Customer benefits • Gen. 3 compact LaserGasTM Technology Open Path monitors are critical in emission Compact high performance gas monitor for ambient long distance monitoring monitoring across a wide range of industrial • For operation in zone 1 (Explosion proof, applications: • No cross interference from other gases Ex-d) • Automatic health check Easy to install • Oil and gas industry • Low power < 15 Watt • Limited need for maintenance • Petrochemical refineries • No need for regular replacement of parts Low cost of ownership Chemical plants • No interference from other gases • Proven and reliable Metal industry • Factory calibrated, no zero drift • Fenceline monitoring Suitable for SIL 2

_aserGas™ III OP HF Gas Detector

Technical Data

General Type:

Near IR Diode Laser

Spectroscopy

IR-source: Diode laser Class 1 M.

eye safe

Detected gas:

Range: Minimum 0-5 ppm*m

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

Calibration: Factory set, no field

calibration necessary

Performance

<+/- 1% of full scale Zero: 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 1mA

Beam Block 2 mA Warning 3 mA

Electrical

Power Supply: 24V DC range 18-32V

Power consumption: <15W

Temprature range

-55 °C to 75 °C Storage temprature:

Humidity (operational): 100% RH

Material

Operating:

TU and RU: Stainless steel

(ASTM 316)

-40 °C to 65 °C

Dimensions / weight

Footprint/weight: Ø 125mm x 250 mm/ 5.5 Kg (12 lbs.) per TU

or RU

Maintenance

Visual inspection: Recommended every

> 6 – 12 months (no consumables needed)

Check recommended Calibration:

every 12 months

Safety

Class 1 according to Laser class:

IEC 60825-1, eye safe

CE: Certified

EMC: Conformant with

directive 2014/30/EU

Approvals

IECEx/ATEX zone 1:

II 2 G Ex d [op is] IIC T6 (TU/RU) II 2 D Ex tb IIIC T88 °C

IP66/IP67 IEC 60529 Ingress:

SIL: Suitable for use in SIL2

systems

Optional junction box (technical data)

Junction box: GRP / aluminum

250 mm x 250 mm/ 2.0 Footprint Junction box:

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