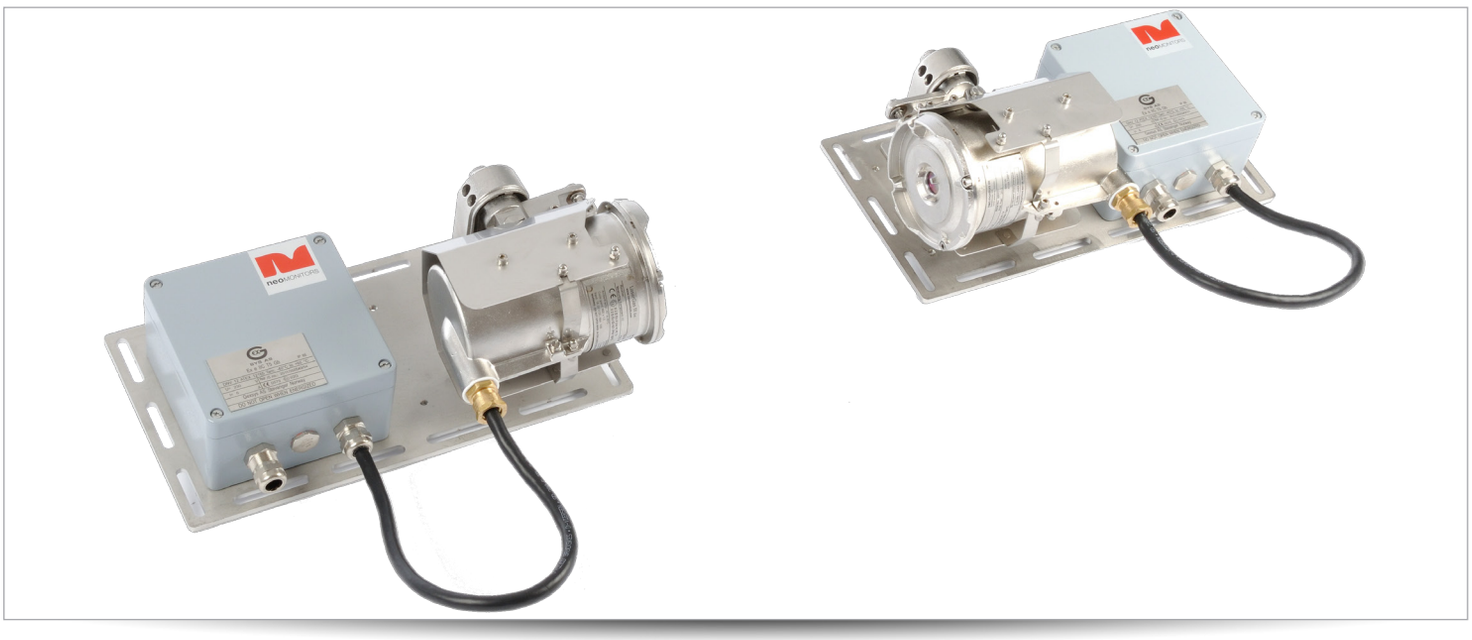
LaserGas™ III OP NH_3 Gas Detector

neoMONITORS



NEO Monitors new LaserGas™ III NH_3 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 NH_3 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 NH_3 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

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

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LaserGas™ III OP NH_3 Gas Detector

Technical Data

General

Type:	Near IR Diode Laser Spectroscopy
IR-source:	Diode laser Class1 M, eye safe
Detected gas:	NH_3
Range:	0-5000 ppm*m
Path lenght:	5-100 m
Self-test:	Continuous
Calibration:	Factory set, no field calibration necessary
LDL:	5ppm*m

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 1mA Beam Block 2 mA Warning 3 mA

Electrical

Power Supply:	24V DC range 18-32V DC
Power consumption:	< 15W

Temprature range

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

Material

TU and RU:	Stainless steel (ASTM 316)

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)
Calibration:	Check recommended every 12 months

Safety

Laser class:	Class 1 according to IEC 60825-1, eye safe
CE:	Certified
EMC:	Conformant with directive 2014/30/EU

Approvals

IECEx/ATEX zone 1: (TU/RU)	II 2 G Ex d [op is] IIC T6 II 2 D Ex tb IIIC T88 °C
Ingress:	IP66/IP67 IEC 60529

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:	I I 2 G Ex e I IC T4/T5/ T6

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

Your local distributor:

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