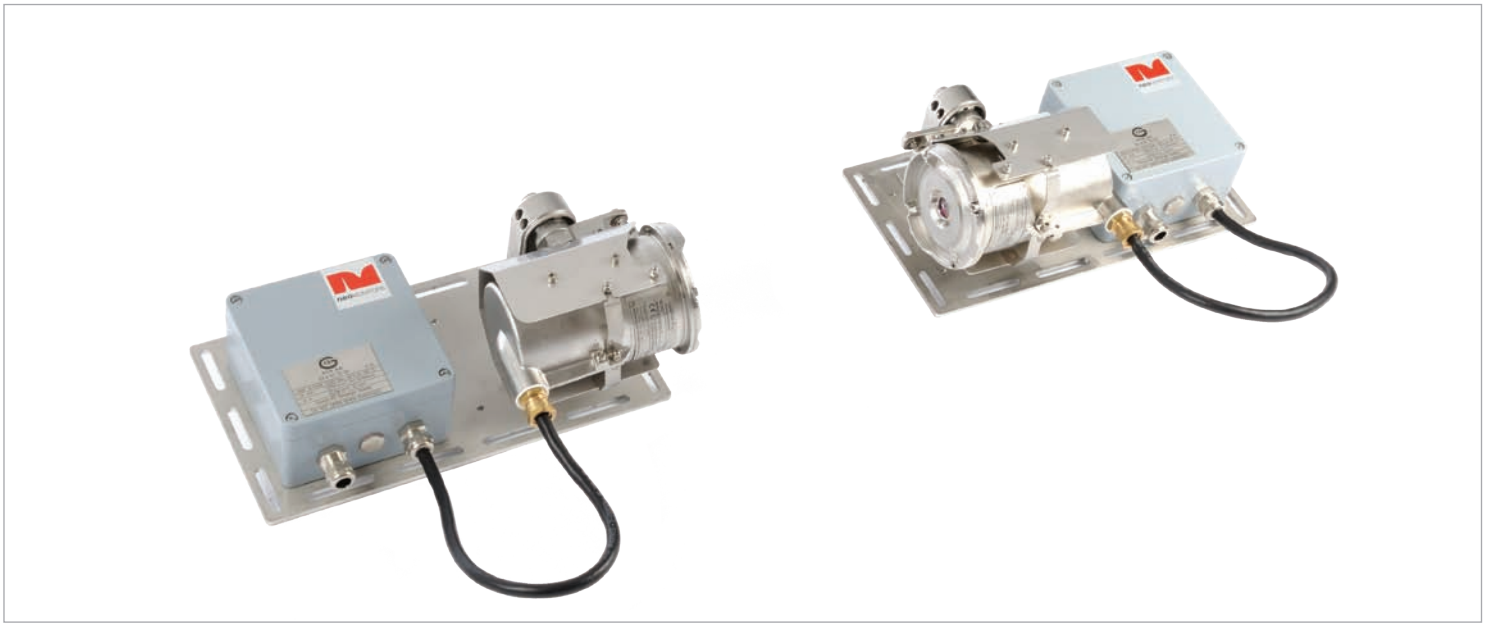
LaserGas™ III OP HF Gas Detector



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 Class 1 M, eye safe
Detected gas:	HF
Range:	Minimum 0-5 ppm*m
Path lenght:	5-100 m
Self-test:	Continuous
Calibration:	Factory set, no field calibration necessary
Zero:	<+/- 1% of full scale
Repeatability:	<+/- 1% of full scale
Response time:	5 sec (adjustable)

Enviromental conditions

Storage temprature:	-55 °C to 75 °C
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 signals:	Fault 1mA Beam Block 2 mA Warning 3 mA

Rating

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

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:	II 2 G Ex d [op is] IIC T6
(TU/RU)	II 2 D Ex tb IIIC T88 °C
Ingress:	IP66/IP67 IEC 60529
SIL:	Suitable for use in SIL2 systems

Materials

TU and RU:	Stainless steel (ASTM 316)

Optics

Alignment:	+/- 0.15 deg
Obscuration:	> 90%

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/T6

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

Your local distributor:

ETA Process Instrumentation
www.etapii.com
sales@etapii.com
tel 978.532.1330

Martech Controls
www.martechcontrols.com
sales@martechcontrols.com
tel: 315.876.9120