

# LaserGas™ III OP NH<sub>3</sub> Gas Detector



NEO Monitors new LaserGas™ III NH<sub>3</sub> 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<sub>3</sub> 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<sub>3</sub> concentration changes along the optical path from the transmitter to the receiver are detected in real-time.

Features	Applications	Customer benefits
<ul style="list-style-type: none"><li>• Gen. 3 compact LaserGas™ Technology</li><li>• For operation in zone 1 (Explosion proof, Ex-d)</li><li>• Automatic health check</li><li>• Low power &lt; 15 Watt</li><li>• No need for regular replacement of parts</li><li>• No interference from other gases</li><li>• Factory calibrated, no zero drift</li></ul>	<p>Open Path monitors are critical in emission monitoring across a wide range of industrial applications:</p> <ul style="list-style-type: none"><li>• Oil and gas industry</li><li>• Petrochemical refineries</li><li>• Chemical plants</li><li>• Metal industry</li><li>• Fenceline monitoring</li></ul>	<ul style="list-style-type: none"><li>• Compact high performance gas monitor for ambient long distance monitoring</li><li>• No cross interference from other gases</li><li>• Easy to install</li><li>• Limited need for maintenance</li><li>• Low cost of ownership</li><li>• Proven and reliable</li></ul>

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## Technical Data

<b>General</b> Type: Near IR Diode Laser Spectroscopy  IR-source: Diode laser Class1 M, eye safe  Detected gas: NH <sub>3</sub> Range: 0-5000 ppm*m Path lenght: 5-100 m Self-test: Continuous Calibration: Factory set, no field calibration necessary  LDL: 5ppm*m  <b>Performance</b> Zero: <+/- 1% of full scale Repeatability: <+/- 1% of full scale Response time: 5 sec (adjustable)  <b>Optics</b> Alignment: +/- 0.15 deg Obscuration: > 90%	<b>Output signals</b> 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  <b>Electrical</b> Power Supply: 24V DC range 18-32V DC  Power consumption: < 15W  <b>Temprature range</b> Storage temprature: -55 °C to 75 °C Operating: -40 °C to 65 °C Humidity (operational): 100% RH  <b>Material</b> TU and RU: Stainless steel (ASTM 316)	<b>Dimensions / weight</b> Footprint/weight: Ø 125mm x 250 mm/ 5.5 Kg (12 lbs.) per TU or RU  <b>Maintenance</b> Visual inspection: Recommended every 6 – 12 months (no consumables needed) Check recommended every 12 months  Calibration: Check recommended every 12 months  <b>Safety</b> Laser class: Class 1 according to IEC 60825-1, eye safe  CE: Certified EMC: Conformant with directive 2014/30/EU  <b>Approvals</b> 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  <b>Optional junction box (technical data)</b> 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 IIC T4/T5/ T6
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\* NEO Monitors reserve the right to change specifications without prior notice

Your local distributor:



Everything You need to measure



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