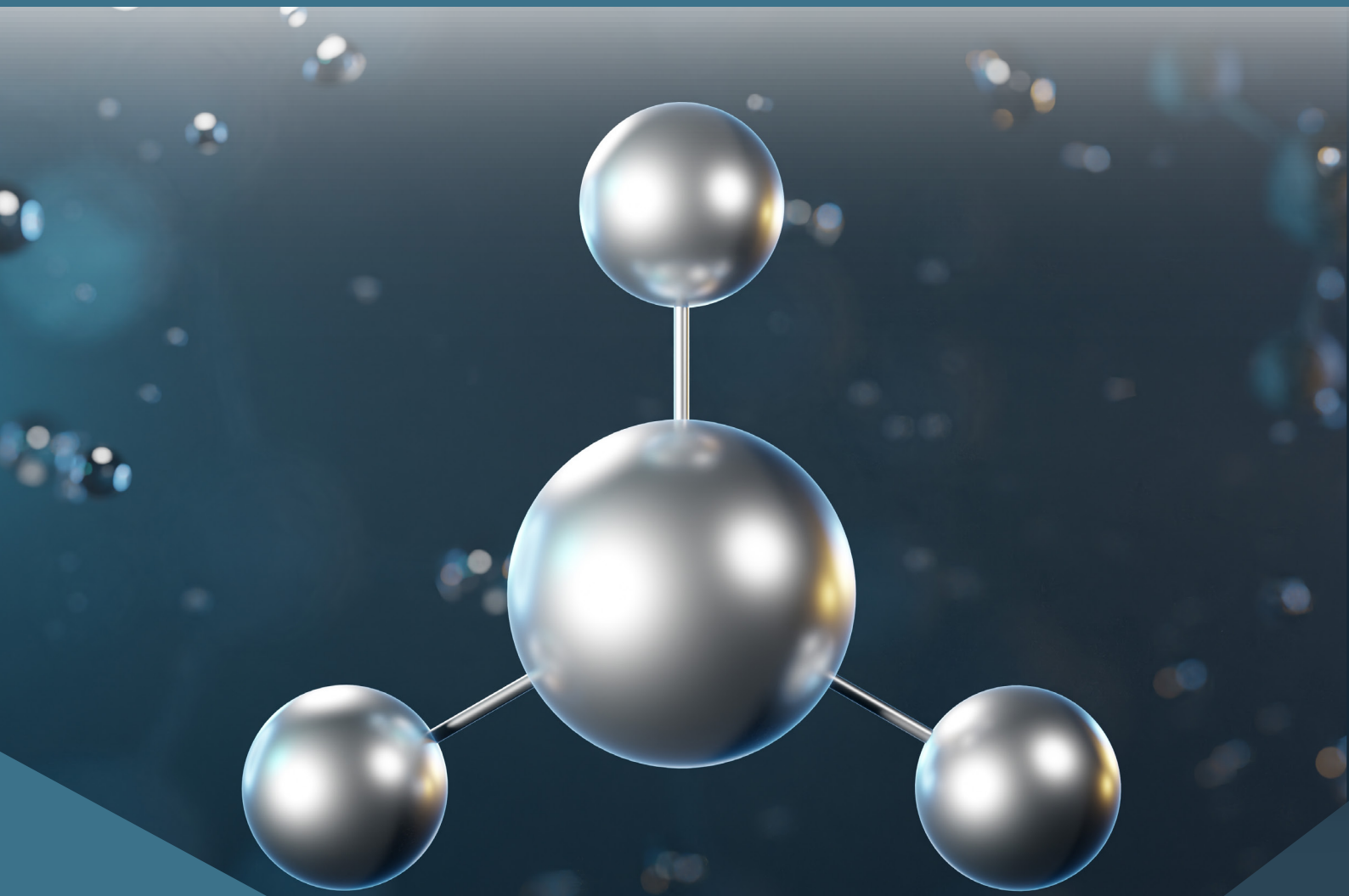
NEO Monitors

LASERGAS™ ANALYZERS FOR AMMONIA MONITORING



ENSURING SAFETY, EFFICIENCY
AND COMPLIANCE

NEO Monitors
A Nederman Company

www.neomonitors.com

NEO Monitors' Ammonia lineup

Ammonia is a key chemical in several industries, particularly in fertilizer production and as a reducing agent in deNOx reactions to abate nitrogen oxide emissions from flue gases. Beyond these applications, ammonia holds promise as a future green fuel due to its lower production and transportation costs compared to liquid hydrogen and methanol. This makes it an attractive option for energy storage and long-distance transportation in a decarbonization world.

Accurate ammonia measurement is essential for process control, emissions monitoring and leak detection to ensure efficiency, safety and environmental compliance. As ammonia's role in energy and industry grows, so does the need for advanced analytical technologies to support its safe and effective use.

/ LaserGas™ III SP NH3

Designed for process control, emission monitoring and safety applications with high demands on fast response times and high selectivity. Extensive portfolio of certifications and approvals: IECEx/ATEX Zone 1, CSA Class I Div 2, IEC 61508 SIL2 capability.

- Fast response time, high selectivity
- Internal span check option available
- Dedicated version for US EPA PS-18 available

/ Performance specifications

DL, ppm vol * m	0.2
Resolution, ppm * m	0.05
Response time, s	< 1

	Min	Max
Range, ppm	5	100 000
OPL, m	0.2	20
Process pressure, bar Abs	0.7	1.5
Process temperature, °C	-40	+600

DL (detection limit) is for ambient P&T, N2/Air background, application & configuration dependent

/ LaserGas™ III OP NH3

Designed for safety open-path applications and fence-line emission monitoring with high demands on fast response times and high selectivity. Extensive portfolio of certifications and approvals: IECEx/ATEX Zone 1, CSA Class I Div 2, IEC 61508 SIL2 capability.

- Fast response time, high selectivity
- Internal span check option available

/ Performance specifications

DL, ppm vol * m	2
Range, ppm vol * m	0 – 40
OPL, m	5 – 100

/ LaserGas™ II SP NH3

Designed for process control and emission monitoring applications with high demands on fast response times and high selectivity. Extensive portfolio of certifications and approvals: IECEx/ATEX Zone 1 (p), IECEx/ATEX Zone 2 (n), CSA Class I Div 2, MCERTS, TÜV QAL1

- Fast response time, high selectivity
- Internal span check option available

/ Performance specifications

DL, ppm vol * m	0.15
Resolution, ppm * m	0.05
Response time, s	< 1

	Min	Max
Range, %	0.001	100
OPL, m	0.2	20
Process pressure, bar Abs	0.7	2
Process temperature, °C	-20	+600

DL (detection limit) is for ambient P&T, N2/Air background, application & configuration dependent

/ QAL1-Version

Component	Certification range	Supplementary measuring ranges	
NH3, mg/m^3	0 – 10	0 – 15	0 – 75
H2O, vol %	0 – 40	0 – 30	0 – 50

The ranges are given in relation to 1 m measuring path.

/ LaserGas™ II MP NH3

Extractive solution with a multipass cell (MPC) for Ammonia applications with high demands on sensitivity. Designed for IECEx/ATEX Zone 2 (n), CSA Class I Div 2 environments.

- High selectivity
- Low detection limit
- Internal span check option available

/ Performance specifications

DL, ppm	0.03
Resolution, ppm	0.01
Response time, s	< 20

	Min	Max
Range, ppm	3	1 000
MPC pressure, bar Abs	1	1.3
MPC temperature, °C	0	+55

DL (detection limit) is for ambient P&T, OPL=11.4 m, N2/Air background, application & configuration dependent; response time is flow-dependent