

Tunable Diode Laser For NH₃ Measurement



Top Performance in Ammonia Measurement

An NH₃ analyzer for challenging applications, the GPro 500 provides reliable measurement in ammonia slip and stack measurement applications.



Low Maintenance and Operating Costs

This ammonia gas analyzer is designed to operate in situ without a maintenance-prone conditioning system, reducing the total cost of ownership.



Easy Installation

The GPro 500 is an alignment-free TDL gas analyzer, meaning that the typical challenges of TDL installation and alignment are significantly reduced.



Designed for Challenging Installations

The GPro 500 is configurable, enabling the ammonia gas analyzer's measurement system to be paired with a variety of process adaptations to meet a wide range of installation requirements, including pipe diameters from 50 mm to over a meter.



GPro 500 TDL Spectrometer For NH₃ Monitoring

The GPro™ 500 ammonia (NH₃) gas analyzer is a unique TDL spectrometer designed for direct measurement of ammonia in stack measurement and ammonia slip applications. It uses a folded-path laser beam design for low maintenance, accurate measurement.

This NH₃ gas analyzer is ideal for process control in ammonia slip applications. The GPro 500 ammonia gas analyzer is a tunable diode laser gas analyzer that offers precise, reliable and fast measurement in critical applications and is SIL 2 compatible.

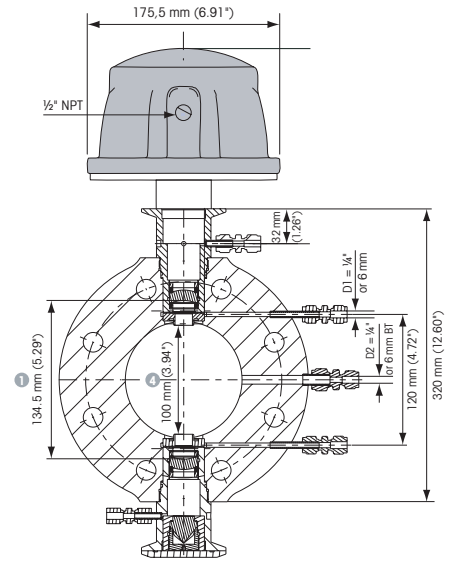
The GPro 500 NH₃ gas analyzer is installed in situ, so you get a quick response without the need to condition a sample. This offers a reliable and cost-effective alternative to technologies that require maintenance-prone extraction and conditioning systems.

Technical data of the Ammonia Analyzer GPro 500¹⁾:

Gas measured	Ammonia (NH ₃)
Lower detection limit	1 ppm-v
Measurement range	0–1%
Accuracy	2 % of reading or 1 ppm, whichever is greater
Linearity	Better than 1%
Resolution	1 ppm-v
Drift	Negligible (<2 % of measurement range between maintenance intervals)
Sampling rate	1 second
Response time (T90)	NH ₃ in N ₂ 1% to 0% in <4 sec
Repeatability	±0.25 % of reading or 5 ppm-v NH ₃ (whichever is greater)
Process pressure range	0.8 bar–3 bar (abs) 11.6 psi–43 psi (abs)
Process temperature range	0–250 °C (32–482 °F) Standard; 0–600 °C (0–1,112 °F) with additional thermal barrier; 0–150 °C (32–302 °F) with PFA or PTFE filter
Effective path length	50 mm–800 mm, depending on adaption

1) Under standard conditions (1m eff. path length, standard p,T, no dust or particulates).

► www.mt.com/NH3-Analyzer



Example installation of Wafer Cell Adaption for GPro 500.



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Subject to technical changes
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