# **Tunable Diode Laser** For CH<sub>4</sub> ppm Measurement



Top Performance in Methane Measurement

A CH₄ analyzer for challenging applications, the GPro 500 provides reliable measurement in syngas and natural gas measurement applications.

### Low Maintenance and Operating Costs This methane gas analyzer is designed to operate in situ without a maintenanceprone 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.



INGOLD

Leading Process Analytics

# **GPro 500 TDL Spectrometer** For CH<sub>4</sub> ppm Monitoring

The GPro<sup>™</sup> 500 methane (CH<sub>4</sub>) gas analyzer is a unique TDL spectrometer designed for direct measurement of methane in syngas and select natural gas measurement applications. It uses a folded-path laser beam design for low maintenance measurement.

This CH<sub>4</sub> gas analyzer is ideal for process control in syngas applications. The GPro 500 methane 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  $CH_4$  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.



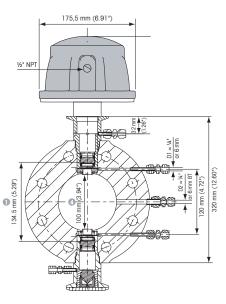


## Designed for Challenging Installations

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

### Technical data of the CH<sub>4</sub> ppm Analyzer GPro 500<sup>1</sup>):

Gas measured	Methane (CH <sub>4</sub> )
Lower detection limit	l ppm-v
Measurement range	0–1%
Accuracy	2% of reading or 1 ppm, whichever is greater
Linearity	Better than 1%
Resolution	l ppm-v
Drift	Negligible (<2 % of measurement range between maintenance intervals)
Sampling rate	1 second
Response time (T90)	$CH_4$ in $N_2$ 1% to 0 % in <4 sec
Repeatability	$\pm$ 0.25 % of reading or 5 ppm-v CH <sub>4</sub> (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



Example installation of Wafer Cell Adaption for GPro 500.

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

## www.mt.com/CH4-Analyzer





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