# **Tunable Diode Laser**

# For O<sub>2</sub> Measurement



## Fast Response In Safety Applications

An oxygen gas analyzer for safety applications, the GPro 500 provides a fast response time in combustion control and inerting applications.



# Low Maintenance And Operating Costs

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



## Easy Installation

This 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 oxygen gas analyzer's measurement system to be paired with a variety of process adaptions to meet a wide range of installation requirements.



# **GPro 500 TDL Spectrometer**

For O<sub>2</sub> Monitoring

The GPro® 500 oxygen gas analyzer is a unique tunable diode laser spectrometer designed for safety applications. It uses a folded-path laser beam design for simple installation and measurement. This oxygen gas analyzer is ideal for applications such as: flare safety control, combustion control, chlorination and oxychlorination, process control, ESP filter production, vent headers, inertization and vapor recovery. The GPro 500 oxygen gas analyzer is installed in situ, so you get a quick response without the need to extract and condition a sample. This provides a fast response time so that you can make real-time reactions to out-of-spec conditions.



### Technical data of the Oxygen Analyzer GPro 5001):

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Gas measured	Oxygen
Lower detection limit	100 ppm-v
Measurement range	0-100%
Accuracy	1 % of reading or 100 ppm $\mathrm{O}_{\mathrm{2}}$ , whichever is greater
Linearity	Better than 1 %
Resolution	0.01 % vol O <sub>2</sub> (100 ppm-v)
Drift	Negligible (<2% of measurement range between maintenance intervals)
Sampling rate	1 second
Response time (T90)	$O_2$ in $N_2$ 21 % to 0 % in <2 seconds
Repeatability	$\pm 0.25\%$ of reading or 0.05 % ${\rm O_2}$ (whichever is greater)
Process pressure range	0.1 bar-10 bar (abs)/4.35 psig-143.03 psig (abs)
Process temperature range	0-250 °C (32-482 °F) standard; 0-600 °C (32-1112 °F) with additional thermal barrier; 0-150 °C (32-302 °F) with white cell, PFE or PTFE filter
Effective path length	50 mm-10 m, depending on adaption

<sup>175,5</sup> mm (6.91°)

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Example installation of Wafer Cell Adaption for GPro 500.

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### www.mt.com/O2-Anglyzer

# GPro 500 In situ TDL ZrO<sub>2</sub> In situ Paramagnetic Analyzer (T<sub>80</sub>) response time Risk of explosion





Process Analytics Local contact: www.mt.com/pro-MOs



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For more information

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