

# TDL-406™ Rackmount Laser Gas Analyzer

Applied Analytics Data Sheet No. DS-011A — Revised 15 July 2019

NH<sub>3</sub>

HCl

H<sub>2</sub>O

CH<sub>4</sub>

CO<sub>2</sub>



The TDL-406™ is a tunable diode laser for real-time monitoring of several components in gases. The system fits a standard 19" rack, designed for easy integration in analyzer shelters and laboratory settings.

## Measurements

- » NH<sub>3</sub> – Low Range: 0-20ppm; High Range: 0-100ppm
- » HCl – Low Range: 0-50ppm; High Range: 0-100ppm
- » H<sub>2</sub>O – 0-30%
- » CH<sub>4</sub> – 0-100ppm
- » CO<sub>2</sub> – 0-1000ppm

## Features

- » Optical, contact-less measurement
- » Accurate laser-diode electro-optics
- » High selectivity
- » Fast response
- » Self-contained
- » Continuous sensor status monitoring
- » Low maintenance
- » Low cost-of-ownership
- » Digital and analog data interfaces
- » Hot-gas measurement up to 190°C

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All performance specifications are subject to the assumption that the sample conditioning system and unit installation are approved by Applied Analytics. For any other arrangement, please inquire directly with Sales.

Subject to modifications. Specified product characteristics and technical data do not serve as guarantee declarations.

Technical Data	
<b>General</b>	
Measurement Principle	Tunable Diode Laser Spectrometry (TDLS)
Sample Medium	Gas
Analyzer Calibration	Factory calibrated
Reading Verification	Via zero and span gases
Human Machine Interface	Applied Analytics standard HMI: industrial controller with touch-screen LCD display Data sheet: <a href="http://aai.solutions/documents/AA_DS202A_HMI.pdf">http://aai.solutions/documents/AA_DS202A_HMI.pdf</a>
Software	ECLIPSE™ online TDL
Data Storage	Solid State Drive Data sheet: <a href="http://aai.solutions/documents/AA_DS204A_SSD.pdf">http://aai.solutions/documents/AA_DS204A_SSD.pdf</a>
Enclosure	19" 5U Rackmount
<b>Ambient Conditions</b>	
Analyzer Environment	Indoor
Ambient Temperature	15 – 50 °C
<b>Physical Specifications</b>	
Dimensions	8.64"H x 19.00"W x 14.05"D
Weight	30 lbs.
Process Connections	1/4" tube fittings
<b>Utility Requirements</b>	
Electrical Requirements	100-240 VAC
Power Consumption	370 Watts
<b>Outputs/Communication</b>	
Outputs	1x 4-20mA analog output    1x Fault Relay (Dry Contact) 1x Ethernet connection for remote control    1x Optional serial connection for Modbus



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