OptiPEAK TDL600

Moisture in Natural Gas Analyzer

Envent Engineering is working in partnership with Michell Instruments to provide a more comprehensive product offering of online process instruments for measuring moisture in Natural Gas. The OptiPEAK TDL600 Tuneable Diode Laser analyzer employs the latest techniques in laser absorption spectroscopy and signal processing power to offer a robust high performance analyzer. This non-contact technology requires minimal maintenance even in demanding applications.

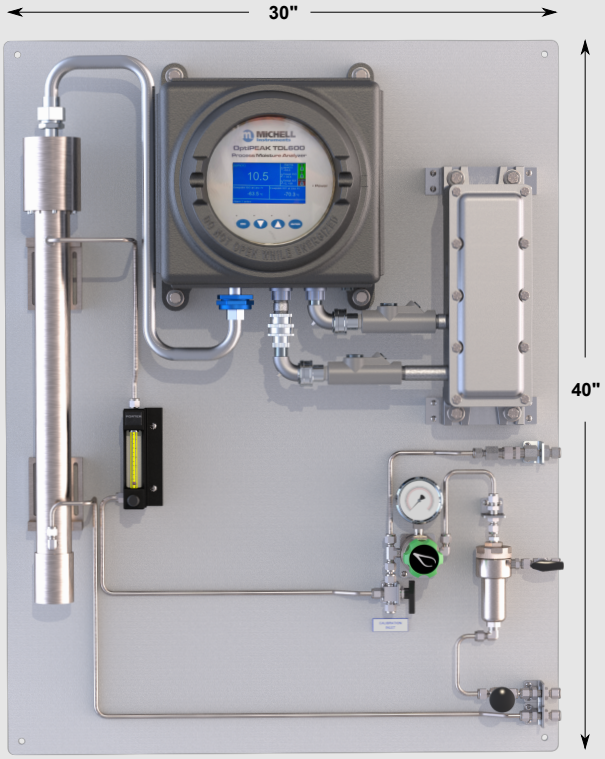
Features

- High accuracy moisture measurement with an operating range of 1 ppm to 1000 ppm
- Simple dual pass cell with light source residing inside the analyzer. Light source is never exposed to process gas
- D-MET active gas compensation compensates for changes in Methane concentrations
- Signal Drift Reduction- built-in continuous laser optimization system ensures that the laser remains locked to the correct water absorption peak
- Built-in self verification and self compensation checks itself against calibration data on every update cycle without the need for an additional reference cell
- Intuitive, 4.3” colour LCD display with touch pad operation
- Sour gas Compatible
- Simple installation and setup
- Low maintenance
- Class I, Division 1 certified for hazardous areas
- Integrated sampling conditioning system
- 40 years of expertise in moisture measurement built into the design

Applications

- Natual gas glycol dehydration
- Natural gas transmission monitoring
- Natural gas Storage
- LNG receiving/re-gasification plants
- Biomethane

OptiPEAK TDL600
Analyzer Control Panel



OptiPEAK TDL600 with Standard Sample Conditioning

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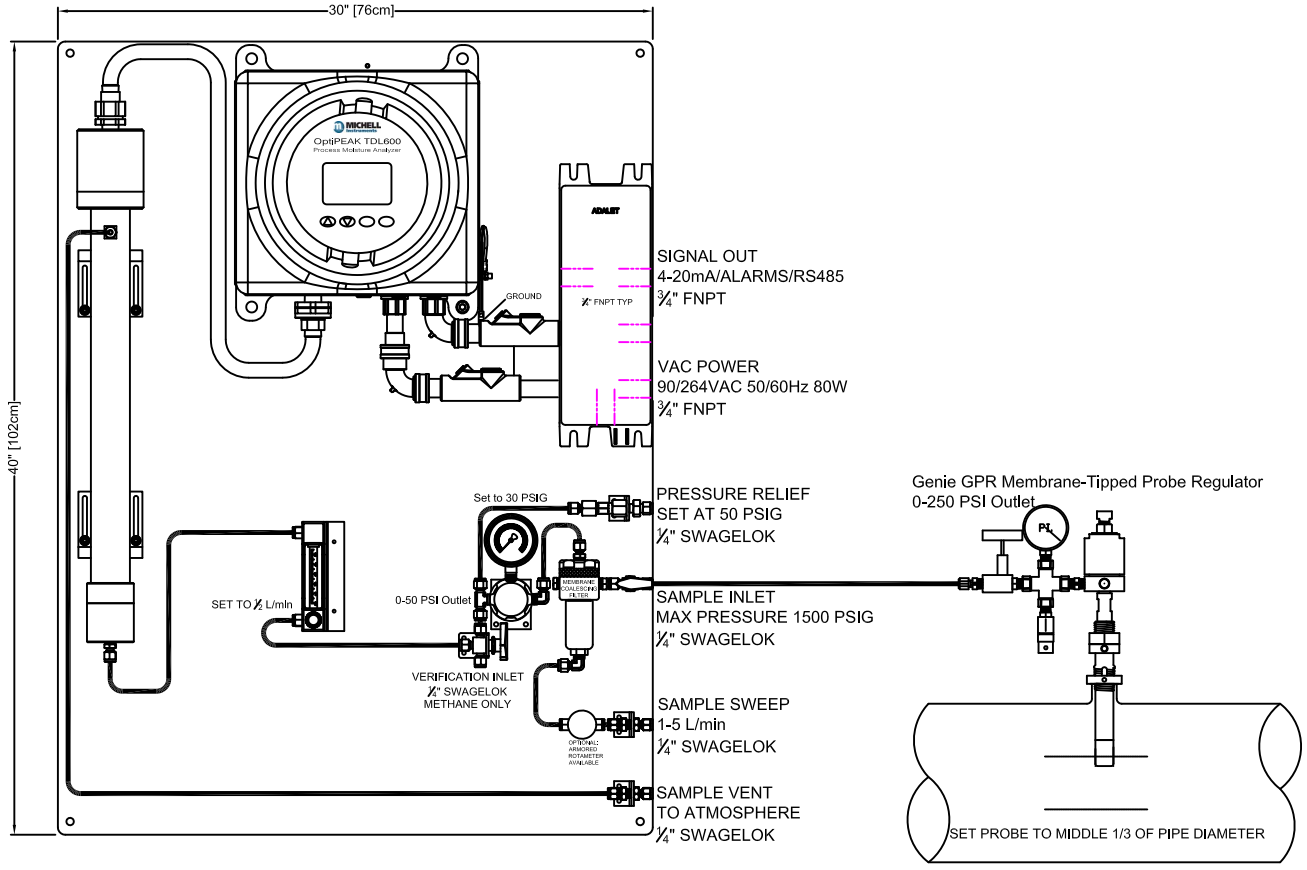
Toll Free (Canada and US): 1-877-936-8368

TDL600 SPECIFICATIONS

Measurement Technology	TDLAS
Measurement Range	1 ppm_v to 1000 ppm_v
Accuracy	±1% of reading > 100 ppm_v ±1ppm_v <100ppm_v
Repeatability	<1 ppm_v (long term stability <0.1ppm_v/year)
Limit of Detection	1 ppm_v
Available Units	ppm_v, lb/MMSCF, (ISO18453 or IGT #8), mg/Nm^3, dew point °C or °F
Response Speed	Optical response 0.2s, display update 2 to 3s
Environment Temperature	10°C to 45°C (50°F to 113°F)
Supply Voltage	90/264 VAC 50/60 Hz
Power Consumption	80W without Heater
Communications	2 x 4-20 mA Inputs 3 x 4-20 mA Outputs (Optional) 3 alarms 250V AC, 3A (volt free contacts) RS485 ModBus RTU

Data Logging	Logs all process variables with a user selectable sample period in the range of 10s to 1 day
Local Interface	4.3" color LCD with touch pad operation
Electrical Connections	3 x 3/4" NPT
Calibration	3-point, traceable to NPL and NIST. No calibration required, dependant on user or quality system requirements.
Sample Flow Rate	1 Nl/min cell sample, 1 to 5 Nl/min sample filter by-pass
Inlet Pressure	Maximum 1500 psig (100barg)
Outlet Pressure	Cell vent 10 to 20 psia (0.8 to 1.4 bara).
Gas Connection	1/4" Swagelok Tube
Weight	88 lbs (40kg) without sample conditioning system
Sample System Enclosure	Carbon Steel or 316L Stainless Steel optional.
Hazardous Area Certification	**ATEX** II 2 Ex d ib op is IIC T5 Gb **IECEx** Ex d ib op is IIC T5 Gb **cMETus** Class I Division 1, Groups C & D. T5 Tamb -20°C to 60°C, IP66 **TC TR Ex** 1 Ex d ib op is IIC T5 Gb



GENERAL ARRANGEMENT

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