# LD8000 MULTIGAS LDetek



# TRACE NITROGEN, OXYGEN, MOISTURE, HYDROCARBONS **IN HELIUM**





The LD8000 MultiGas is an online gas analyzer to monitor trace N2, O2, H2O, CnHm in Helium. The compact 4U unit has been designed to meet the requirements of the Helium cryogenic installations for online measurement.

#### **FEATURES:**

- Unique compact chassis (4U rack mount) to cover up to four measurements (N2, O2, H2O, CnHm)
- Bootloader integrated for software update via Ethernet
- · Large scale measurement
- · 4-20 mA outputs as standard
- · Optional zero gas calibration free system

- Range Identification Relay
- LAN/Web control
- · Micro-valve for very low dead volume and fast purging time
- · Low sample consumption
- Front adjustment valve for sample bypass flow to purge the sample gas line before the analyzer

#### **APPLICATIONS:**

- Helium cryogenic installation
- · Cryogenic truck loading station
- · Process control

- · Helium liquification plants
- · Research center

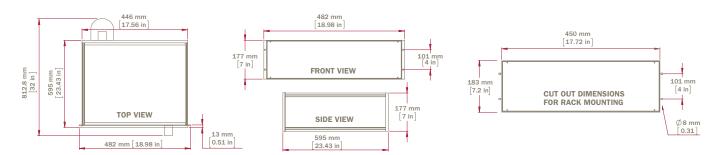
## **SPECIFICATIONS:**

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DETECTOR TYPES	Plasma Emission Detector for $\rm N_2$ - $\rm O_2$ - $\rm H_2O$ - $\rm CnHm$			
RANGE FOR N <sub>2</sub>	0 - 10 ppm, resolution to 100 ppb	0 - 100 ppm, resolution to 1 ppm		
RANGE FOR O <sub>2</sub>	0 - 3 ppm, resolution to 100 ppb	0 - 30 ppm, resolution to .1 ppm		
RANGE FOR H <sub>2</sub> O	0 - 3 ppm, resolution to 100 ppb	0 - 30 ppm, resolution to .1 ppm		
RANGE FOR CNHM	0 - 3 ppm, resolution to 100 ppb	0 - 30 ppm, resolution to .1 ppm		
STANDARD FEATURES	<ul> <li>Manual or autoranging (user selectable)</li> <li>Microprocessor controlled</li> <li>5.6" TFT intelligent LCD module with Touch Screen</li> <li>Self diagnosis system with auto-resolve alarm</li> <li>LAN/Web control</li> </ul>	<ul> <li>4-20 mA isolated outputs (one for each component)</li> <li>Alarm Historic</li> <li>Safe calibration procedure to avoid any bad calibration</li> <li>Digital ouputs for remote monitoring: (all dry relay contacts)</li> <li>System status (1 output)</li> <li>Range in use (1 output)</li> </ul>		
OPTIONS	<ul><li>Internal sampling system for zero, span and sample</li><li>Zero calibration gas free system</li></ul>	<ul> <li>Serial port: RS-232 / 422 / 485 / Profibus</li> <li>2 alarm outputs (user programmable set point)</li> </ul>		
GAS CONNECTIONS	Sample: 1/8" compression fittings	Vent: 1/8" compression fitting		
CALIBRATION GAS	Zero: LDP1000 purified gas or Zero calibration gas free system Span 1: 8.0 ppm $\rm N_2$ and $\rm O_2$ + 3 ppm CH4 in Helium (application dependent)	Span 2: 8.0 ppm H20 in Helium (application dependent)		
SAMPLE FLOW REQUIREMENTS	50 sccm for N2 channel (PED#1) 20 sccm for O2 channel (PED#2) 20 sccm for H20 channel (PED#3)	20 sccm for CnHm channel (PED#4) Bypass flow per channel : 100 sccm		
NITROGEN DOPING GAS FLOW REQUIREMENT	20 sccm for O2 channel (PED#2) 20 sccm for H20 channel (PED#3)	20 sccm for CnHm channel (PED#4)		
RECOMMENDED MINIMUM OPERATING PRESSURE	4 PSIG (28 kPAG) optional 1 PSIG (7 kPAG)			
OPERATING TEMPERATURE	10 °C to 45 °C			
SUPPLY	115 VAC, 50 - 60 Hz or 220 VAC, 50 - 60 Hz			
ACCURACY	Better than ± 1% full scale			
DRIFT	< ± 1% over 24 hours			
RESPONSE TIME	T90 < 60 seconds			
WEIGHT	45-60 lbs (20-27 kg) (depending of options)			

# **ORDERING INFORMATION:**

LD8000 MULTIGAS	-x-x-x-x	-xxx	-x	-xxx	-X	-xxx
	N2: Nitrogen 02: Oxygen H20: moisture CnHm: hydrocarbons	Operating Voltage: 120: 120 volts 220: 220 volts	<b>A:</b> Alarm option	Integrated sampling system <b>S1:</b> 1 sample + zero + span <b>S2:</b> 2 samples + zero + span	C: Zero gas free system	Serial communication RS2: RS-232 RS4: RS-485 PFB: Profibus

## **DIMENSIONS:**



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