# LD8000



# **TRACE NITROGEN IN ARGON,** HELIUM AND CRUDE ARGON ANALYZER



The LD8000 is an online analyzer to monitor trace N2 in Ar/He/Crude Argon. Plasma emission detector is used to selectively measure trace N2 in Argon or/and Helium bulk gases. The analysis of trace N2 in Neon, Xenon and Krypton can also be realized.



## **FEATURES:**

- Trace Nitrogen in Argon/Helium/Crude Argon
- Compact 3U rackmount enclosure
- Large scale measurement
- 4-20 mA outputs as standard
- LAN/Web control

• Air separation unit

**APPLICATIONS:** 

- Helium cryogenic installation
- Cryogenic truck loading station
- Speciality gas laboratories
- Process control
- Argon purification plant
- Steel Industries
- Chemical plants

- Range Identification Relay
- · Micro-valve for very low dead volume and fast purging time
- Low sample consumption
- Optional zero gas calibration free system
- Welding gas control
- Helium liquification plants
- Gas management system
- Semiconductor manufacturing
- Quality control for truck fills and gas cylinders
- Inert glove box systems
- Universities and laboratories

# **SPECIFICATIONS:**

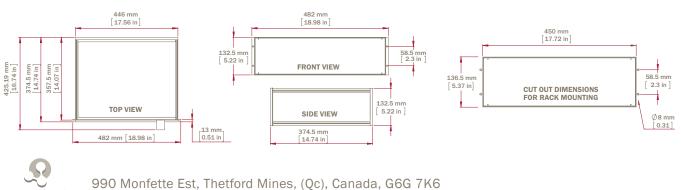
DETECTOR TYPES	Plasma Emission Detector for $N_2$					
RANGE FOR N <sub>2</sub>	0 – 1 ppm, resolution to 10 ppb 0 – 10 ppm, resolution to .1 ppm	0 – 100 ppm, resolution to 1 ppm other range possible up to 5000 ppm configurable				
STANDARD FEATURES	<ul> <li>Manual or autoranging (user selectable)</li> <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>4-20 mA isolated outputs</li> </ul>	<ul> <li>Alarm Historic</li> <li>Safe calibration procedure to avoid any bad calibration</li> <li>Digital ouputs for remote monitoring: (all dry relay contacts) <ul> <li>System status (1 output)</li> <li>Range in use (3 outputs per impurity)</li> <li>Calibration in use (1 output)</li> </ul> </li> </ul>				
OPTIONS	<ul> <li>Internal sampling system for zero, span and sample</li> </ul>	<ul> <li>Serial port: RS-232 / 422 / 485 / Profibus</li> <li>2 alarm outputs (user programmable set point)</li> <li>Zero calibration gas free system</li> </ul>				
GAS CONNECTIONS	Sample: 1/8" compression fittings	Vent: 1/8'' compression fitting				
CALIBRATION GAS	Zero: LDP1000 purified gas (Getter)	Span: 8.0 to 9.5 ppm $\rm N_2^{}$ (application dependant)				
SAMPLE FLOW REQUIREMENTS	75 to 200 sccm					
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%					
RESPONSE TIME	T90 < 10 seconds					
OPERATING SAMPLE PRESSURE RANGE	3-30psig (for lower sample pressure requirement, an additional high purity pump is used)					
OUTLET PRESSURE	Atmospheric					
ENCLOSURE TYPE	3U rackmount type					
INGRESS PROTECTION	IP20 in accordance with IEC 60529					
ENCLOSURE FINISH	RAL7030 powder coat					
CERTIFICATION	In compliance with EMC directive 2004/108/EC, EN 61000-6-2:2005 for immunity & EN 61000-6-4:2007 for emissions					
WEIGHT	29 lbs (13 kg)					

# **ORDERING INFORMATION:**

LD8000	-X	-X	-XXX	-X	-XX	-X	-XXX	-X
	N2: Nitrogen	A: Argon H: Helium C: Crude Argon D: Dual (Argon + Helium)	Operating Voltage: <b>120:</b> 120 volts <b>220:</b> 220 volts	A: 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: <b>RS2:</b> RS-232 <b>RS4:</b> RS-485 <b>PFB:</b> Profibus	P: Purge value and flowmeter

# **DIMENSIONS:**

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