

# LD8000

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



The LD8000 is the new standard for trace Nitrogen. Its unique design brings reliability and accuracy needed for such measurement. Its own Plasma Emission Detector System extends the lifetime of the cell. This Duty Cycle Controlled System has the property to decrease contamination and coating inside the plasma cell giving a more efficient, reliable and accurate analyzer.

### FEATURES:

- Unique Plasma Emission Detector design based on a Duty Cycle Controlled System.
- Bootloader integrated for software update via Ethernet
- Large scale measurement
- 4-20 mA output as standard
- Range Identification Relay
- Maintenance free
- LAN/Web control
- Micro-valve for very low dead volume and fast purging time
- Low sample consumption
- 3U cabinet
- Optional zero gas calibration free system

### APPLICATIONS:

- Air separation unit
- Cryogenic truck loading station
- Speciality gas laboratories
- Process control
- Argon purification plant
- Steel Industries
- Chemical plants
- Welding gas control
- Helium liquification plants
- Gas management system
- Semiconductor manufacturing
- Quality control for truck fills and gas cylinders

## SPECIFICATIONS:

<b>DETECTOR TYPE</b>	Plasma Emission Detector design based on a Duty Cycle Controlled System	
<b>RANGE</b>	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 10000 ppm
<b>REPEATABILITY</b>	< 1% full scale	
<b>ACCURACY</b>	Better than ±1% full scale	
<b>STANDARD FEATURES</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>4-20 mA isolated output</li> <li>Alarm Historic</li> <li>Safe calibration procedure to avoid any bad calibration</li> <li>Digital outputs for remote monitoring: (all dry relay contacts)                             <ul style="list-style-type: none"> <li>- System status (1 output)</li> <li>- Range in use (3 output)</li> <li>- Calibration in use (1 output)</li> </ul> </li> </ul>
<b>OPTIONS</b>	<ul style="list-style-type: none"> <li>Internal sampling system for zero, span and sample with remote capabilities</li> <li>Serial port: RS-232 / 422 / 485 / Profibus</li> </ul>	<ul style="list-style-type: none"> <li>2 alarm outputs (user programmable set point)</li> <li>Zero calibration gas free system</li> </ul>
<b>GAS CONNECTIONS</b>	Sample: 1/8" compression fittings	Vent: 1/8" compression fitting
<b>CALIBRATION GAS</b>	Zero: LDP1000 purified gas (Getter)	Span: 8.0 to 9.5 ppm N2/Ar
<b>SAMPLE FLOW REQUIREMENTS</b>	15 to 200 sccm	
<b>FLOW ACCURACY</b>	0 to 200 sccm ± 1% full scale	
<b>MAX OPERATING PRESSURE</b>	30 PSIG (207 kPAG)	
<b>MIN OPERATING PRESSURE</b>	4 PSIG (28 kPAG) optional 1 PSIG (7 kPAG)	
<b>OPERATING TEMPERATURE</b>	10 °C to 45 °C	
<b>SUPPLY</b>	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
<b>POWER CONSUMPTION</b>	Maximum 40 watts	
<b>DRIFT</b>	< ± 1% over 24 hours	
<b>WEIGHT</b>	29 lbs (13 kg)	

## ORDERING INFORMATION:

LD8000	-X	-XXX	-X	-XXX	-X	-XXX
	<b>A:</b> Argon <b>H:</b> Helium <b>D:</b> Dual (Argon + Helium) <b>C:</b> Crude Argon	Operating Voltage: <b>120:</b> 120 volts <b>220:</b> 220 volts	<b>A:</b> Alarm option	Integrated sampling system <b>S1:</b> 1 sample + zero + span <b>S2:</b> 2 samples + zero + span	<b>C:</b> zero gas free system	Serial communication: <b>RS2:</b> RS-232 <b>RS4:</b> RS-485 <b>PFB:</b> Profibus

## DIMENSIONS:

