

# LD8001



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



The LD8001 is an online analyzer to monitor trace N<sub>2</sub> in Ar/He/Crude Argon. Plasma emission detector is used to selectively measure trace N<sub>2</sub> in Argon or/and Helium bulk gases. The analysis of trace N<sub>2</sub> in Neon, Xenon and Krypton can also be realized.



Plasma Emission  
Detector for N<sub>2</sub>

### FEATURES:

- Trace Nitrogen in Argon/Helium/Crude Argon
- Compact 3U rackmount enclosure
- Large scale measurement
- 4-20 mA outputs as standard
- LAN/Web control
- Range Identification Relay
- Micro-valve for very low dead volume and fast purging time
- Low sample consumption
- Optional zero gas calibration free system
- Touchscreen 7" HMDI TFT Display

### APPLICATIONS:

- Air separation unit
- Helium cryogenic installation
- 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
- Inert glove box systems
- Universities and laboratories

## SPECIFICATIONS:

<b>DETECTOR TYPES</b>	Plasma Emission Detector for N <sub>2</sub>	
<b>RANGE FOR N<sub>2</sub></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 5000 ppm configurable
<b>STANDARD FEATURES</b>	<ul style="list-style-type: none"> <li>• Manual or autoranging (user selectable)</li> <li>• Microprocessor controlled</li> <li>• Touchscreen 7" HMDI TFT Display</li> <li>• Self diagnosis system with auto-resolve alarm</li> <li>• Alarm Historic</li> </ul>	<ul style="list-style-type: none"> <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 outputs per impurity)</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</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> <li>• 4-20 mA isolated outputs</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 N <sub>2</sub> (application dependant)
<b>SAMPLE FLOW REQUIREMENTS</b>	75 to 200 sccm	
<b>OPERATING TEMPERATURE</b>	10 °C to 45 °C	
<b>SUPPLY</b>	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
<b>ACCURACY</b>	Better than ± 1% full scale	
<b>DRIFT</b>	< ± 1%	
<b>RESPONSE TIME</b>	T90 < 10 seconds	
<b>OPERATING SAMPLE PRESSURE RANGE</b>	3-30psig (for lower sample pressure requirement, an additional high purity pump is used)	
<b>OUTLET PRESSURE</b>	Atmospheric	
<b>ENCLOSURE TYPE</b>	3U rackmount type	
<b>INGRESS PROTECTION</b>	IP20 in accordance with IEC 60529	
<b>ENCLOSURE FINISH</b>	RAL7030 powder coat	
<b>CERTIFICATION</b>	In compliance with EMC directives : IEC 61000-4-3: 2020, IEC 61000-4-6: 2013, IEC 61000-4-2: 2008, IEC 61000-4-4: 2012, IEC 61000-4-5: 2014 A1: 2017, IEC 61000-4-8: 2009, IEC 61000-4-11: 2020 for immunity & CISPR 32: 2015 A1: 2019, FCC Part 15, Subpart B: 2021, CISPR 32: 2015 A1: 2019, FCC Part 15, Subpart B: 2021 for emissions.	
<b>WEIGHT</b>	29 lbs (13 kg)	

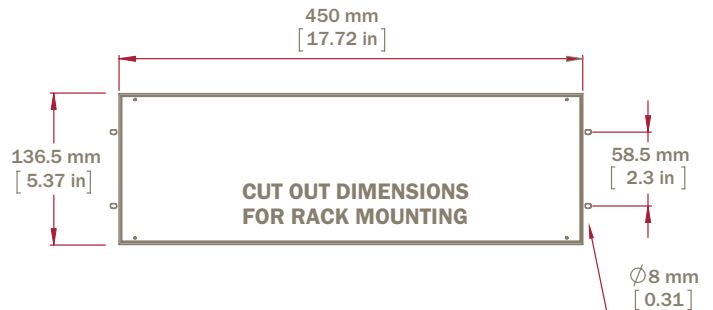
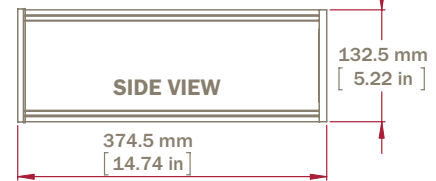
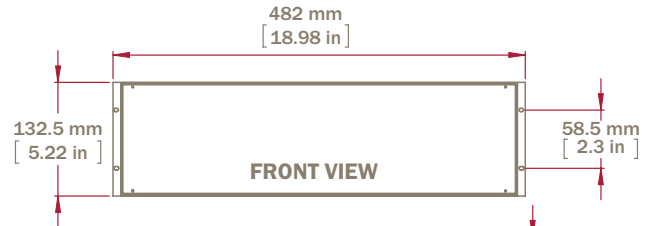
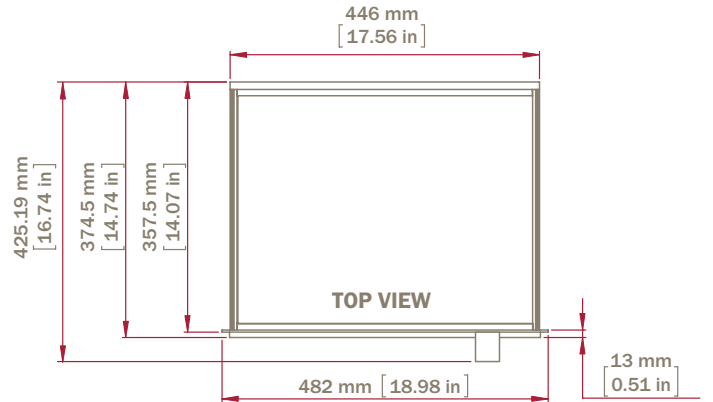
## ORDERING INFORMATION:

### Product Parent Code : LD8001

LD8001 (ppm) Impurity N<sub>2</sub> , Detector PED

PRODUCT ORDERING CODE		
{Feature A} + {Feature B} + {Feature C} + {Feature D} + ... + {Feature H}		
Feature	Item	Description
FEATURE {A}	<b>BASE MODEL</b>	
	LD8001	Trace N2 analyser with plasma emission detector, 0-1, 0-10, 0-100 ppm (as default), electronic flow control
FEATURE {B}	<b>SAMPLE GAS</b>	
	B1	Argon
	B2	Helium
	B3	Crude Argon
FEATURE {C}	<b>OPERATING VOLTAGE</b>	
	C1	120V
FEATURE {D}	<b>OUTPUT</b>	
	D0	No output
	D1	4-20 mA Outputs
FEATURE {E}	<b>SERIAL COMMUNICATION</b>	
	E0	No Serial Interface
	E1	Serial Interface - Modbus RS232
	E2	Serial Interface - Modbus RS-485
	E3	Serial Interface - Modbus Ethernet
FEATURE {F}	<b>INTEGRATED SAMPLING SYSTEM</b>	
	F0	No integrated sampling system
	F1	1 sample + zero + span
FEATURE {G}	<b>ZERO GAS FREE</b>	
	G0	No Zero gas free system
FEATURE {H}	<b>PURGE OPTION</b>	
	H0	No purged valve and flowmeter
	H1	Electronic purge

## DIMENSIONS:



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