



LD8001+



ONLINE PPT/PPB TRACE NITROGEN IN ARGON/HELIUM ANALYZER



The LD8001+ is designed for ultra-pure Argon or Helium gas analysis. With its integrated ppt/ppb oscillation module, unique performance can be achieved. Low ppt ultra-fast analysis for online trace nitrogen is now possible without the need of a gas chromatograph. This compact design makes it very attractive for particularly the semiconductor market.

FEATURES:

- Unique Plasma Emission Detector design based on a Duty Cycle Controlled System
- Integrated oscillation system for drift removal and quick response time
- Bootloader integrated for software update via Ethernet
- LAN/Web control
- Touchscreen 7 inches HDMI TFT display
- 4-20 mA output as standard
- Range Identification Relay
- Micro-valve for very low dead volume and fast purging time.
- Low sample consumption
- 3U cabinet

APPLICATIONS:

- Semiconductor manufacturing
- Air separation unit
- Speciality gas laboratories
- Process control
- Argon purification plant
- Chemical plants
- Helium liquification plants
- Gas management system

SPECIFICATIONS:

DETECTOR TYPE	Plasma Emission Detector design based on a Duty Cycle Controlled System. Integrated oscillating sub ppb system.	
RANGE	0 – 50 ppb/0-500 ppb/0-1000 ppb	
REPEATABILITY & ACCURACY	< +/- 1% (refer to design report)	
RESPONSE TIME	< 1 minute	
STANDARD FEATURES	<ul style="list-style-type: none"> • Manual or auto-ranging (user selectable) • Microprocessor controlled • Touchscreen 7 inches HDMI TFT display • Self diagnosis system with auto-resolve alarm • 4-20 mA isolated output • Alarm Historic • Safe calibration procedure to avoid any bad calibration • Digital outputs for remote monitoring: (all dry relay contacts) <ul style="list-style-type: none"> - System status (1 output) - Range in use (3 output) - Calibration in use (1 output) 	
OPTIONS	<ul style="list-style-type: none"> • RS-232 / 422 / 485 / Profibus / ProfiNet / Ethernet IP / Modbus / EtherCat • 2 alarm outputs (user programmable set point) 	
GAS CONNECTIONS	Sample: 1/8" face seal fittings	Vent: 1/8" compression fitting
CALIBRATION GAS	Zero: Integrated in the unit with LDP1000	Span: 1000ppb N2
SAMPLE FLOW REQUIREMENTS	150 sccm at 15psig to 500sccm at 30psig	
SAMPLE GAS OPERATING PRESSURE	10-30 psig	
OPERATING TEMPERATURE	10 °C to 45 °C (must be stable)	
SUPPLY	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
POWER CONSUMPTION	Maximum 110 watts	
DRIFT/STABILITY	< +/- 0.01% (refer to design report)	
WEIGHT	37 lbs (17 kg)	
ENCLOSURE TYPE	3U rackmount	
INGRESS PROTECTION	IP20 in accordance with IEC 60529	
ENCLOSURE FINISH	RAL7030 powder coat	
CERTIFICATION	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.	



ORDERING INFORMATION:

Product Parent Code : LD8001+

LD8001+ (ppb) Impurity N₂, Detector PED

PRODUCT ORDERING CODE {Feature A} + {Feature B} + {Feature C} + {Feature D} + {Feature E}		
Feature	Item	Description
FEATURE {A}	BASE MODEL	
	LD8001+	Trace ppb N ₂ analyser with plasma emission detector, 0-50, 0-500, 0-1000 ppb (as default), electronic flow control
FEATURE {B}	SAMPLE GAS	
	B1	Argon
	B2	Helium
FEATURE {C}	OPERATING VOLTAGE	
	C1	120V
	C2	220V
FEATURE {D}	OUTPUT	
	D0	No output
	D1	4-20 mA Outputs (Default qty - 1)
	D2	A (Alarm option) (Default qty - 1)
FEATURE {E}	SERIAL COMMUNICATION	
	E0	No Serial Interface
	E1	Serial Interface - Modbus RS232 (Default qty - 1)
	E2	Serial Interface - Modbus RS-485 (Default qty - 0)
	E3	Serial Interface - Modbus Ethernet (Default qty - 0)
	E4	Serial Interface - Profibus (Default qty - 0)

DIMENSIONS:

