

LD8000 MULTIGAS



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:

DETECTOR TYPES	Plasma Emission Detector for N ₂ - O ₂ - H ₂ O - CnHm	
RANGE FOR N₂	0 – 10 ppm, resolution to 100 ppb	0 – 100 ppm, resolution to 1 ppm
RANGE FOR O₂	0 – 3 ppm, resolution to 100 ppb	0 – 30 ppm, resolution to .1 ppm
RANGE FOR H₂O	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 style="list-style-type: none"> Manual or autoranging (user selectable) Microprocessor controlled 5.6" TFT intelligent LCD module with Touch Screen Self diagnosis system with auto-resolve alarm LAN/Web control 	<ul style="list-style-type: none"> 4-20 mA isolated outputs (one for each component) 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 (1 output)
OPTIONS	<ul style="list-style-type: none"> Internal sampling system for zero, span and sample Zero calibration gas free system 	<ul style="list-style-type: none"> Serial port: RS-232 / 422 / 485 / Profibus 2 alarm outputs (user programmable set point)
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 N ₂ and O ₂ + 3 ppm CH ₄ in Helium (application dependent)	Span 2: 8.0 ppm H ₂ O in Helium (application dependent)
SAMPLE FLOW REQUIREMENTS	50 sccm for N ₂ channel (PED#1) 20 sccm for O ₂ channel (PED#2) 20 sccm for H ₂ O channel (PED#3)	20 sccm for CnHm channel (PED#4) Bypass flow per channel : 100 sccm
NITROGEN DOPING GAS FLOW REQUIREMENT	20 sccm for O ₂ channel (PED#2) 20 sccm for H ₂ O 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 O2: Oxygen H2O: moisture CnHm : hydrocarbons	Operating Voltage: 120: 120 volts 220: 220 volts	A: Alarm option	Integrated sampling system S1: 1 sample + zero + span S2: 2 samples + zero + span	C: Zero gas free system	Serial communication RS2: RS-232 RS4: RS-485 PFB: Profibus

DIMENSIONS:

