



LD8001TCD



BINARY GAS ANALYZER



The LD8001-TCD is a Thermal Conductivity-based Gas Analyzers used to measure and monitor binary gas streams. It can also monitor one component in a more complex gas mixture when the background gases have the same ratio to each other, or have similar thermal conductivity values.

FEATURES:

- Unique Thermal Conductivity Detector (TCD)
- Bootloader integrated for software update via Ethernet
- Large scale measurement
- 4-20 mA output as standard
- Range Identification Relay
- Touchscreen 7 inches HDMI TFT display
- LAN/Web control
- Micro-valve for very low dead volume and fast purging time
- 3U cabinet

APPLICATIONS:

- Gas Manufacturing Facilities: monitoring Pressure Swing Adsorption (PSA) Systems
- Gas management system
- Hydrogen production
- Gas Blending Equipment
- Air Liquification Plants: monitoring purity of Ar, O₂, H₂, N₂, He, CO₂, or Ne
- Welding gas control
- Steel Mills: CO₂ in off-gas from gas generators
- Petroleum Refineries: H₂ purity in C₁ - C₆ hydrocarbons
- Speciality gas laboratories
- Heat Treating: H₂ in N₂ and other annealing gases
- Process control
- Power Generation Plants: H₂ cooling gas in turbine generator housings; CO₂ in turbine generator housing; checking H₂ purity
- Ammonia Plants
- Chemical plants
- Refrigeration Facilities

SPECIFICATIONS:

DETECTOR TYPE	Thermal Conductivity Detector (TCD)	
RANGE	Ppm to % (application dependant)	
ACCURACY	Better than 3% FS	
STANDARD FEATURES	<ul style="list-style-type: none">• Manual or autoranging (user selectable)• Microprocessor controlled• Touchscreen 7 inches HDMI TFT display• Self diagnosis system with auto-resolve alarm• LAN/Web control• 4-20 mA isolated output• Alarm Historic	<ul style="list-style-type: none">• 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">• Internal sampling system for zero, span and sample• RS-232 / 422 / 485 / Profibus / ProfiNet / Ethernet IP / Modbus / EtherCat• 2 alarm outputs (user programmable set point)	
GAS CONNECTIONS	Sample: 1/8" compression fittings	Vent: 1/8" compression fitting
SAMPLE FLOW REQUIREMENTS	300 sccm	
SAMPLE GAS OPERATING PRESSURE	3 to 30 PSIG	
OPERATING TEMPERATURE	10 °C to 45 °C	
SUPPLY	115 VAC, 50 – 60 Hz or 220 VAC, 50 – 60 Hz	
POWER CONSUMPTION	Maximum 40 watts	
WEIGHT	30 lbs (14 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-TCD

LD8001-TCD Binary gas analyser

PRODUCT ORDERING CODE {Feature A} + {Feature B} + {Feature C} + {Feature D} + ... + {Feature F}		
Feature	Item	Description
BASE MODEL		
FEATURE {A}	LD8001-TCD	Binary gas analyser with a Thermal Conductivity Detector in %.
SAMPLE GAS		
FEATURE {B}	BX	Contact Engineer to select sample gas
OPERATING VOLTAGE		
FEATURE {C}	C1	120V
	C2	220V
OUTPUT		
FEATURE {D}	D0	No output
	D1	4-20 mA Outputs (Default qty - 1)
	D2	A (Alarm option) (Default qty - 1)
SERIAL COMMUNICATION		
FEATURE {E}	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)
INTEGRATED SAMPLING SYSTEM		
FEATURE {F}	F0	No integrated sampling system
	F1	1 sample + zero + span
	F2	2 samples + zero + span

DIMENSIONS:

