LD5-I8/V8 and LE5-I8/V8 scanning monitors

Description

The LD5-I8 monitor allows monitoring/control of up to eight 4–20mA analog inputs. The LD5-V8 monitor allows monitoring/control of up to eight 0-10VDC analog inputs (other DC voltage ranges may be available on request). LE5 model versions include Ethernet communications, 16MB data logger memory and web page accessibility. Four setpoint relay outputs with flexible operation modes are provided as standard with a further 4 relays being optionally available.

Displays available are:

20mm 6 digit, standard contrast LED display 38mm 6 digit, standard or high contrast LED display 45mm 5 digit, standard contrast LED display 57mm 4 digit, standard contrast LED display 58mm 4 digit, high contrast LED display 100mm 4 digit, standard or high contrast LED display 200mm 6 digit, standard or high contrast LED display 200mm 4 digit, standard or high contrast LED display

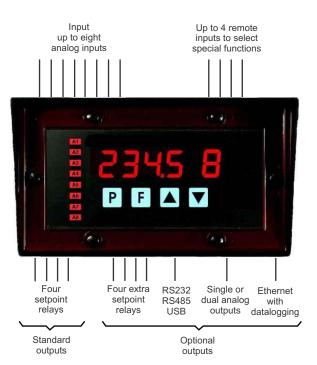
The 38mm, 58mm, 100mm and 200mm high contrast versions are available in Red, Green, Amber or White LED. The 200mm display is also available in standard contrast version Red, Green, Amber or White LED. The display will cycle through the active channels showing the channel number and the value. The 4 and 5 digit versions will flash the channel number then show the reading.

Displays are mounted in an IP65 enclosure. All calibration and setting up is achieved by user pushbuttons using easy to follow messages on the display or via the free downloadable Windows software (a serial converter may be required). Programming functions include decimal point, digital filter, alarm setpoint parameters, number of input channels, calibration and scaling. Each input may be individually calibrated and the instrument retains the calibration values in non volatile memory.

A programmable digital filter improves stability by smoothing out short term interference. The setpoint alarms may be individually configured for setpoint level, hysteresis, high and/or low alarm, relay trip delay, normally open or normally closed operation, latching or non latching operation. Individual relays may be allocated to any input channel or a number of channels or to operate from a calculated value e.g. average or highest. Relays 1 and 2 can be dedicated for use as PI control (frequency or pulse width) if required.

The embedded web page in LE5 models allows viewing via PC, laptop, tablet or smart phone (Android or IOS).







38mm display version



100mm green display version

LD5-I8V8-1.7-0

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0.1 Technical specifications

Input types: Accuracy: Sample rate: ADC Resolution: Thermal stability: Ambient temperature: Humidity:	 4-20mA or 0-10 Volts DC models available. Input type is factory configured. 0.1% of full scale 3 samples per second (8 channels scanned in approx. 2.4 secs) Effective resolution 18.5 bits 25ppm per °C LED -10 to 60° C 5 to 95% non condensing
Power supply:	100 and 200mm LED:
11 7	AC 240 or 110V selectable, 50/60Hz or
	AC 48/42/32/24 selectable, 50/60Hz or
	DC isolated wide range 12 to 24V.
	20mm, 38mm, 45mm, 57 or 58mm LED:
	AC 240/110V 50/60Hz or
	AC 24 to 48V 50/60Hz or
	DC isolated wide range 12 to 48V or
	DC 24V non isolated
	Supply type is factory configured
Output (standard):	4 x relays, 1 x Form C, 3 x Form A rated 5A resistive.
	Programmable N.O. or N.C. Relays 1 and 2 can alternatively be set for PI control (frequency or pulse width)
Output (standard):	Ethernet (LE5 models only), can be used with Modbus TCP

Optional outputs - some but not all options below are available in combination

4 extra relays, form A
Single 4 to 20mA 12 bit
Single 4-20mA, 0-1VDC or 0-10VDC (user selectable), 16 bit
(4-20mA will drive into resistive loads of up to 800Ω)
Analog outputs can be configured for retransmission or PI control
RS485 isolated 8 bit (ASCII or Modbus RTU functions 1 and 3)
RS232 serial comms. 8 bit (ASCII or Modbus RTU functions 1 and 3)
USB port, type B

Applications/input types available with large digit display models - see individual brochures

- 8 channel scanning, RTD, Thermocouple and 4-20mA/DCV input versions available
- Analog input, process transmitters etc. ± 20 mA, 4-20mA or ± 2.5 VDC or ± 25 VDC
- Pulse input, rate, total, count, grand total (encoders, switches, proximity sensors etc.)
- Temperature RTD, thermocouple, 4-20mA
- Weighing 4 or 6 wire mV/V output loadcells
- Pressure measurement 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Liquid level measurement 4 or 6 wire mV/V pressure sensors or 4-20mA analog transducers
- Serial input RS232, RS485 for slave displays etc.
- Synchronous Serial Interface (SSI) for high accuracy position etc. measurement
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Multifunction timer elapsed time, stopwatch, run time etc.

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LD5-I8, LE5-I8, LE5-V8 and LD5-V8 order codes

The last sections is for optional items (if required).

A A Main input board type	
LD5 Input board with no Ethernet, no optional Datalogger memory, no Web page	
LE5 Input board with Ethernet and Datalogger memory fitted, Web page	
Input signal type	
V8 0-10VDC (other DC voltages may be available on request)	
Power supply	
ACH ···· 240VAC/110VAC	
DC 12 to 48VDC isolated (20 to 58mm displays) or 12 to 24VDC (100 & 200mm displays) DCN 24V non isolated (20 to 58mm displays only)	
Display type	
20R6 20mm 6 digit red LED - with front pushbuttons and alarm anunciators	
38R6 38mm 6 digit red LED - with front pushbuttons and alarm anunciators	
38D6	
38A6	
38W6 38mm 6 digit white LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable	
45R5 45mm 5 digit red LED - with front pushbuttons and alarm anunciators 57R4 57mm 4 digit red LED	
58R4	
58G4	
58W4 58mm 4 digit white LED - high contrast daylight viewable	
100R4 · 100mm 4 digit red led	
100R6 100mm 6 digit red led 100D4 100mm 4 digit red led - high contrast daylight viewable	
100G4 100mm 4 digit red led - high contrast daylight viewable	
100A4 · · · 100mm 4 digit amber led - high contrast daylight viewable	
100W4 100mm 4 digit white led - high contrast daylight viewable 100D6 100mm 6 digit red led - high contrast daylight viewable	
100G6 100mm 6 digit green led - high contrast daylight viewable	
100A6 100mm 6 digit amber led - high contrast daylight viewable	
100W6100mm 6 digit white led - high contrast daylight viewable 200R4200mm 4 digit red led - standard brightness	
200G4 200mm 4 digit green led - standard brightness	
200A4 200mm 4 digit amber led - standard brightness 200W4 200mm 4 digit white led - standard brightness	
200RD	
200GD · · · † · · · · · · 200mm 4 digit green led - high contrast daylight viewable	
200AD 200mm 4 digit amber led - high contrast daylight viewable 200WD 200mm 4 digit white led - high contrast daylight viewable	
Optional outputs	
S RS232/RS485 serial communications - isolated	
U USB communications port - isolated SU RS232/RS485 plus USB port - isolated	
SRRRR RS232/RS485 serial communications plus 4 extra relays	
URRRR · · · · · · · · · USB port plus 4 extra relays	
SURRRR RS232/RS485 plus USB port plus 4 extra relays I 4-20mA analog retransmission 12 bit - isolated	
A 4-20mA, 0-1VDC or 0-10VDC analog retransmission 16 bit - isolated	
IRRRR 4-20mA analog retransmission 12 bit - isolated plus 4 extra relays	
ARRRR 4-20mA, 0-1V or 0-10VDC output 16 bit - isolated plus 4 extra relays RRRR 4 extra relays	
II Dual 4-20mA output 12 bit - isolated	
AA Dual 4-20mA output plus RS485 serial communications - isolated	
Ethernet, datalogger memory and web page cannot be retrofitted to existing LD5 models.	

8 channel RTD (Pt100 or Pt1000) input version, model LD5-RT8 also available with same power supply, display and output options as above - see separate brochure

8 channel thermocouple input version, model LD5-TC8 also available with same power supply, display and output options as above - see separate brochure

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