# Economical Large Digit Display LD4-IVT totaliser from analog input

4 x 57mm high LED digits



#### Features

- 57mm (visible to 25m)
- Totaliser display from analog input
- Total retained in memory for 1 week with power removed
- Displays in engineering units
- High brightness LED displays
- Pushbutton calibration and setup
- 16VDC unregulated transmitter supply (AC supply models)
- 240VAC, 110VAC, 12 to 16VAC powered or DC (15 to 24V non isolated) powered or optional isolated DC (12 to 24or 28 to 48VDC) factory configured
- Digital filter, improves stability
- Two Alarm/control relay outputs (5A)
- 2 year guarantee
- Rugged, weatherproof, IP65 rated, housing
- Remote input to perform special functions e.g. zero, display toggle, total reset, brightness level switching, high/low memory, peak hold, display hold.setpoint only access or security lockout
- Optional serial communications, analog retransmission, extra relays, panel mounting kit and hood removal

#### Description

Model LD4-IVT is a high visibility analog input totaliser display. The instrument will accept inputs of  $\pm 20$ mA, 4-20mA,  $\pm 100$ mV,  $\pm 1$ V,  $\pm 10$ V or  $\pm 100$ V (user selectable via links). From these inputs the display can be scaled to read in engineering units e.g. "Metres", "Litres" etc. The total is retained in memory for a minimum of 1 week with power removed.

The instruments feature flexible pushbutton scaling and programming with "on display" messages being used to assist in setting up. The displays are housed in a robust industrial IP65 enclosure.

Each instrument is supplied with a two control/alarm setpoint relays. Optional outputs include isolated analog retransmission (4-20mA, 0-1V or 0-10V, selectable) or isolated serial retransmission (RS232 or RS485, factory configured, with a choice of ASCII or Modbus RTU protocols) and isolated  $\pm$ 12V (24V) transmitter supply.

The programmable digital filter can be used to improve stability by smoothing out short term interference. An external input is configurable to perform one of various functions e.g. zero, display toggle, total reset, brightness level switching, high/low memory, peak hold, display hold, setpoint only access or security lockout. This input can also be used to allow fast and easy access to the alarm setpoints.



#### LD4IVT-2.4-0

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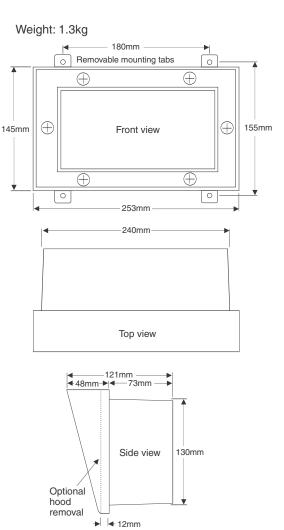
Unit 5, 28 Leighton Place Hornsby NSW 2077 Australia Telephone: +61 2 9476 2244 Facsimile: +61 2 9476 2902 ACN: 001 589 439

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#### **Technical Specifications**

#### Dimensions

Input Types:	$\pm 20$ mA, 4-20mA, $\pm 100$ mV, $\pm 1$ V, $\pm 10$ V or $\pm 100$ VDC, link selectable		
Accuracy:	0.1% of full scale when calibrated		
Input impedance:	$80\Omega$ nominal (4-20mA or $\pm 20$ mA input) $1M\Omega$ (DC Volts input)		
Memory:	Total retained in memory for 1 week with power removed		
Sample rate:	4 per second		
ADC resolution:	1 in 20,000		
Microprocessor:	MC68HC11 CMOS		
Ambient Temp:	$-10^{\circ}$ C to $60^{\circ}$ C		
Humidity:	5% to 95% non condensing		
Outputs:	2 x setpoint relays, form A, rated 5A at 240VAC (resistive load)		
Power Supply:	See order code table (type is factory configured)		
Power consumption:	AC supply, 15VA max. DC supply, depends on supply voltage, typically 500mA (2A peak) for 24V using non isolated power supply		



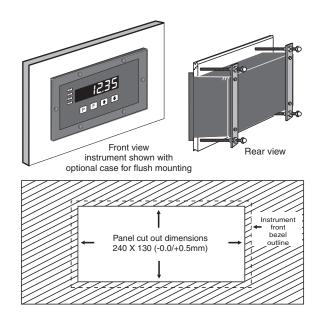
Order Codes

Order Code	Display	Supply Voltage	
LD4-IVT-240-574	4 x 57mm red LED	240VAC	
LD4-IVT-110-574	4 x 57mm red LED	110VAC	
LD4-IVT-DCN-574	4 x 57mm red LED	15-24VDC non isolated	
LD4-IVT-DC-574	4 x 57mm red LED	12-48VDC isolated	

### Options

Option Code	Description		
LD4-OPT-12	24VDC transmitter supply ( $\pm$ 12VDC)		
LD4-OPT-C2	RS232 serial comms, non-isolated		
LD4-OPT-C4	RS485 serial comms, non-isolated		
LD4-OPT-A	Isolated analog retransmission 4-20mA, 0-1VDC or 0-10VDC selectable		
LD4-OPT-RR	2 extra setpoint relays		
LD-MTG-PM-KIT	Panel mount kit incl brackets & screws		
LD-HOOD-REMOVAL	Front hood removal		

## **Panel Mounting Options**



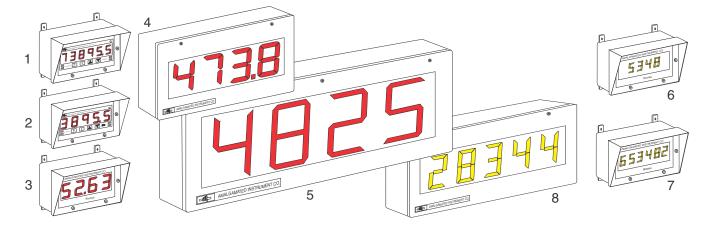
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#### Displays available in Large Digit Series



No.	LED digit size	No of digits	No.	"FLIP" digit size	No of digits
1	38mm	6	6	39mm - selected models	4
2	45mm	5	7	39mm - selected models	6
3	57mm or 58mm	4	8	100mm	4, 5 and 6
4	100mm	4 and 6	38, 58, 100 and 200mm LED displays		
5	200mm	4	are available in red, green, amber or white		

#### Applications/input types available with large digit display models

- Analog input, process transmitters etc.  $\pm 20$ mA, 4-20mA or  $\pm 2.5$ VDC or  $\pm 25$ 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, Serial current loop 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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