

# Economical Large Digit Display LD4-SG for strain bridge input

4 x 57mm high LED digits



## Features

- 57mm high digits (visible to 25m)
- Displays in engineering units (scaleable)
- High brightness LED displays
- User selectable decimal point position
- Pushbutton calibration and setup
- Digital filter, improves stability. Uses weighted average method to reduce effects of short term interference
- Two alarm/control relay outputs (5A). The relays can be configured with high and/or low trip points and for normally open or normally closed operation
- Two point and single point offset calibration scaling methods available
- High and low limits can be set for visual alarm - can be set to cause display to flash the value on the display or to display error message **-or-**
- Rugged, weatherproof, IP65 rated housing
- Zero range limit facility
- Remote input to perform special functions, e.g. Brightness level switching, high/low memory, peak hold, display hold, setpoint only access, security lockout, tare, zero or calibration scale switching. The calibration scale switching function allows two sets of calibration scaling settings to be used with the user toggling between each via a remote switch
- 2 year guarantee

## Description

The LD4-SG is designed for use with a 4-wire strain bridge input.

The monitor can be used with load cells, pressure transducers, level transducers etc with a mV/V output. The LD4-SG provides excitation voltage to the transducer (5VDC or 10VDC - user selectable) and can be configured for input ranges of 0.5mV/V to 20mV/V and above. The range setting is made by jumpers in the unit and by a function setting.

Some jumpers are set within the instrument to define the input type but calibration, alarm settings, decimal point etc are all carried out using the push buttons on the main board of the instrument.

The 57mm LED display is housed in a rugged, IP65 rated, UV stabilised ASA enclosure.



LD4SG-2.5-0

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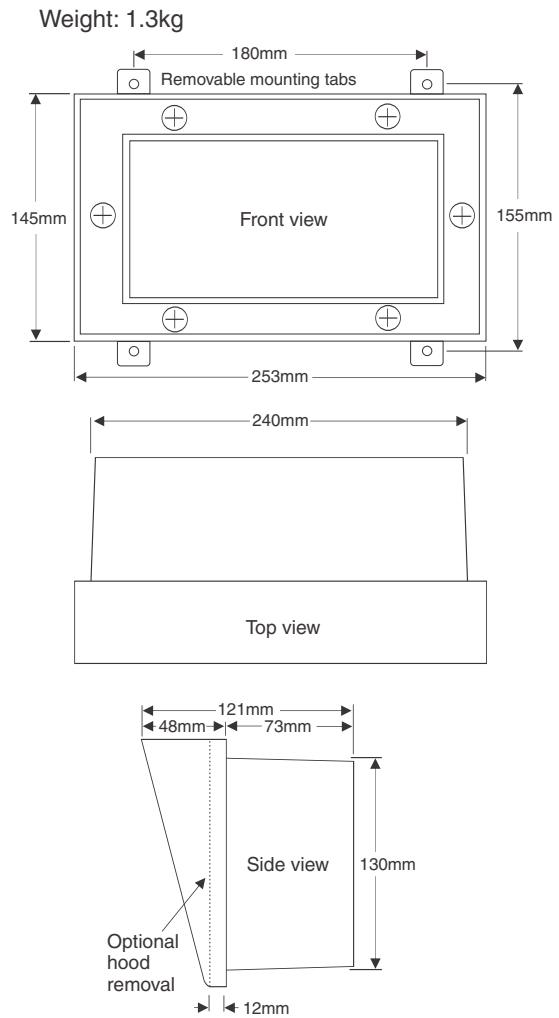
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## Technical Specifications

Specifications are subject to change without notice

Input types	Load cell, pressure transducer, level sensor, etc - 4 wire type. Up to 20mV/V signal input
Excitation	10V or 5V, link selectable. 5V must be used if load cell resistance is less than 350Ω (nominal)
Accuracy	0.1% of full scale when calibrated
Sample Rate	4 per second
ADC resolution	1 in 20,000
ADC conversion	Dual slope ADC
Microprocessor	MC68HC11 CMOS
Ambient temperature	-10°C to 60°C
Humidity	5% to 95%
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 24VDC using non isolated DC supply

## Weight and Dimensions



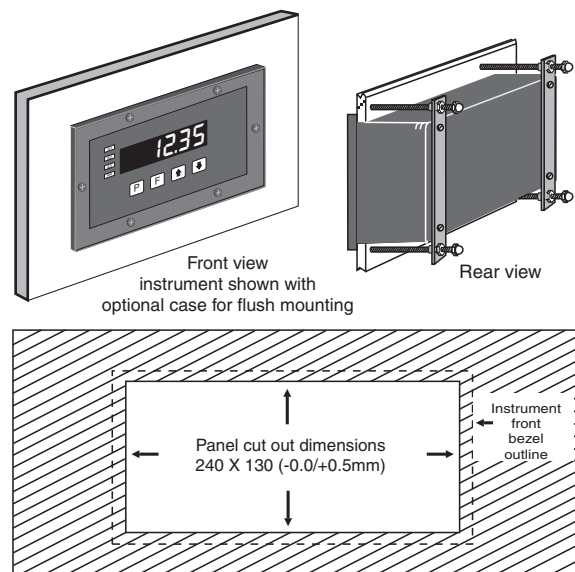
## Order Codes

Order Code	Display	Supply Voltage
LD4-SG-240-574	4 x 57mm red LED	240VAC
LD4-SG-110-574	4 x 57mm red LED	110VAC
LD4-SG-DCN-574	4 x 57mm red LED	15-24VDC non isolated
LD4-SG-DC-574	4 x 57mm red LED	12-48VDC isolated
LD4-SG-60VDC-574	4 x 57mm red LED	24-60VDC isolated

## Options

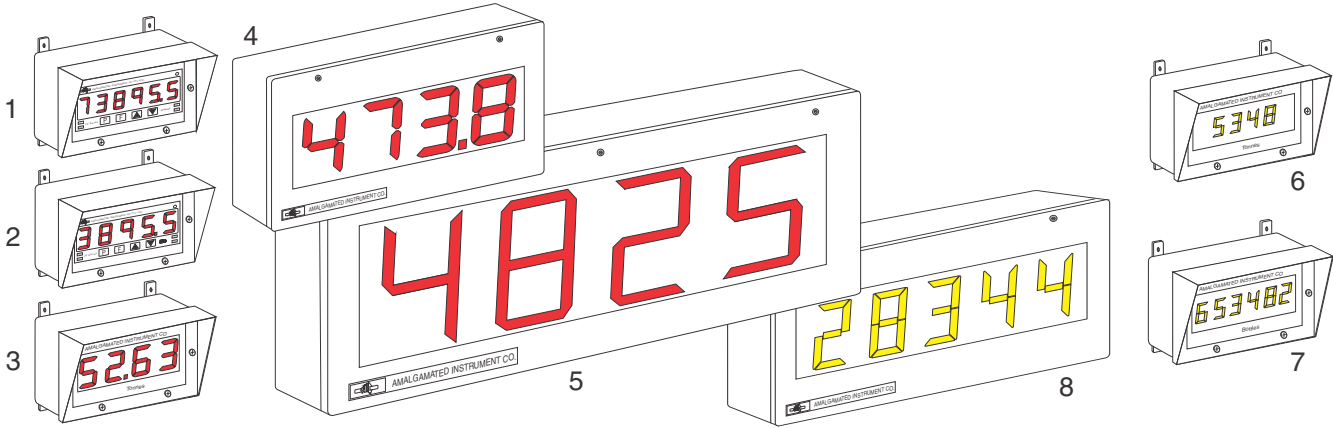
Option Code	Description
LD4-OPT-C2	RS232 serial comms, non-isolated
LD4-OPT-C4	RS485 serial comms, non-isolated
LD-MTG-PM-KIT	Panel mount kit incl brackets & screws
LD-HOOD-REMOVAL	Front hood removal

## 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 are available in red, green, amber or white		
5	200mm	4			

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

- Analog input, process transmitters etc.  $\pm 20\text{mA}$ , 4-20mA or  $\pm 2.5\text{VDC}$  or  $\pm 25\text{VDC}$
- 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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