

# Large Digit Display – 200mm digit height 50 point lineariser

4-20mA, DCmV, DC Volts or slidewire input



## Description

The LD-LN with the 200mm displays will be ideal for those DC mA, DC Volt or slidewire input applications where a linearised display from a non linear rate, volume, load, pressure, weight or position input need to be visible from a distance up to 1000m.

The display can be scaled in engineering units e.g. "Litres per minute", "Litres", "Kilograms", "PSI" etc.

Storage tanks and silos, water treatment plants, are just some of the possible applications for these large digit displays.

The input type is set by internal circuit board jumpers but calibration, alarm settings, decimal point etc are all carried out using the push buttons on the main board of the instrument.

The 200mm LED digit displays are housed in rugged, IP65 rated, powder coated zinc coated steel enclosures.

A shroud is available for the 200mm displays to provide some protection from direct light if required.

## Features

- Up to 50 linearising points can be entered
- Input from  $\pm 20\text{mA}$ , 4-20mA,  $\pm 2.5\text{VDC}$ ,  $\pm 25\text{VDC}$  or Slidewire (0-1k $\Omega$  to 0-1M $\Omega$ ) potentiometer
- 4 digit 200mm Red LED
- IP65 rated wall mount enclosure, powder coated steel standard, stainless steel optional
- Dual 4-20mA analog retransmission model available
- 4 configurable setpoint relays standard rated at 240VAC, 5A into a resistive load, form C.
- Pushbutton setup and calibration, display can be scaled without special tools
- 2 calibration memories can be stored
- 3 configurable remote inputs as standard
- Remote inputs can be configured to one of a wide range of functions including zero, tare, peak hold, etc.
- Programmable digital filter
- RS232 or RS485 serial communications optionally available
- Inbuilt data logger optionally available
- The auto-brightness feature for LED displays varies the display brightness to suit the ambient light
- 2 year guarantee
- See separate brochures for 38, 45, 57mm and 100mm display models



LDLN200-4.0-0

**AMALGAMATED INSTRUMENT CO PTY LTD**

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby  
NSW 2077 Australia

Telephone: +61 2 9476 2244  
Facsimile: +61 2 9476 2902

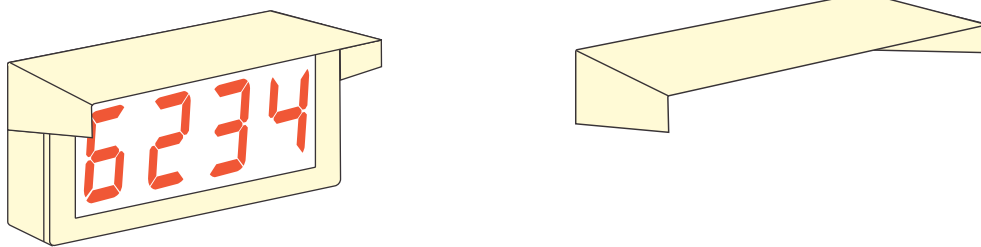
e-mail: sales@aicpl.com.au  
Internet: www.aicpl.com.au

## Specifications

Table:	Up to 50 linearising points can be entered
Input:	$\pm 20\text{mA}$ , 4-20mA, $\pm 2.5\text{VDC}$ , $\pm 25\text{VDC}$ or Slidewire (0-1k $\Omega$ to 0-1M $\Omega$ )
Input impedance:	64 $\Omega$ nominal for 4 to 20mA/20mA range and 1M $\Omega$ on DC voltage ranges
Accuracy:	Better than 0.1% of full scale (alarms and display) when calibrated
Sample rate:	5 samples/second
Display update:	4 times per second
ADC resolution:	1 in 32,000
ADC conversion:	Sigma delta
Microprocessor:	MC68HC11 CMOS
Ambient temp:	-10°C to 60°C
Humidity:	5% to 95% non condensing
Display type:	200mm 4 digit red LED See separate LD-IV brochures for other display sizes
Outputs (standard):	4 x relays, form C, rated at 240VAC, 5A resistive
Outputs (optional):	See order code table (type is factory configured)
Relay action:	Programmable N.O. or N.C.
Environmental rating:	IP65
Size:	850 x 360 x 155mm
Weight:	13kg
Power Supply:	See order code table (type is factory configured)
Power Consumption:	AC supply: 15VA max, DC supply: depends on supply voltage, typically 1.3A for 24VDC

## Optional shrouds

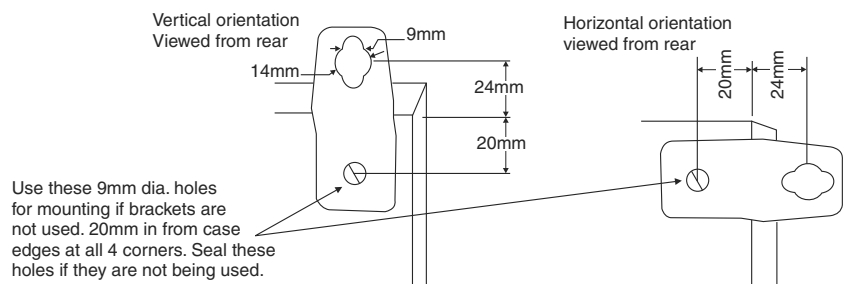
Shroud kits for 200mm displays are made from a single piece of powder coated zinc coated steel to match the metal enclosures. The overhang of the shroud is 150mm.



## Mounting brackets

The 100mm models are shipped with 4 metal brackets and mounting hardware. The diagrams illustrate vertical and horizontal installation of these brackets.

If mounting without the brackets, then the 9mm diameter case holes provided for the brackets can be used as alternative mounting holes. If the brackets are not used in mounting, then these holes should be sealed against dust and water.



LDLN200-4.0-0

**AMALGAMATED INSTRUMENT CO PTY LTD**

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby  
NSW 2077 Australia

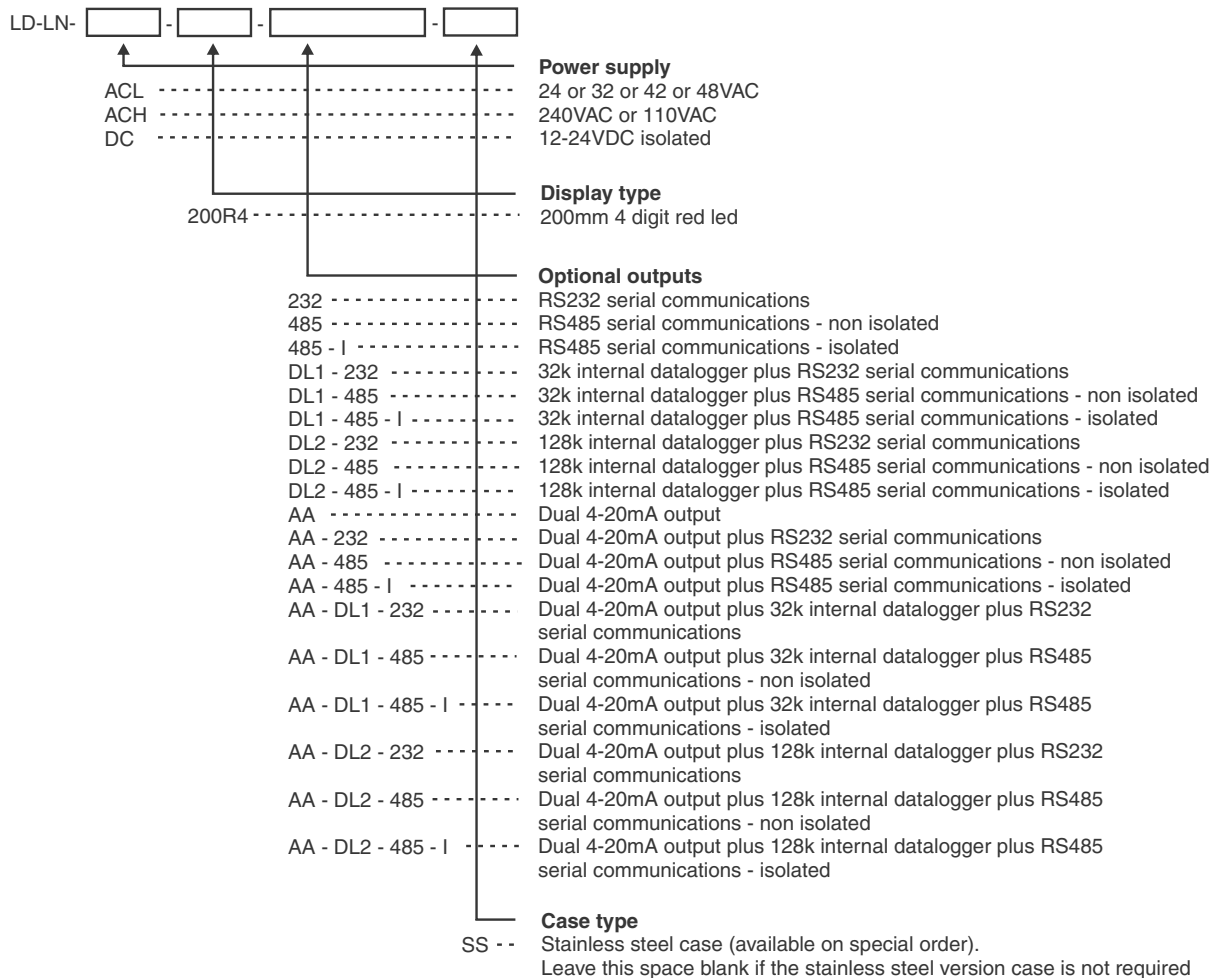
Telephone: +61 2 9476 2244  
Facsimile: +61 2 9476 2902

e-mail: sales@aicpl.com.au  
Internet: www.aicpl.com.au

## LD-LN order codes for 200mm displays

The last two sections are for optional items (if required).

Optional outputs are factory configured. Analog outputs cannot be retrofitted.



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

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

LDLN200-4.0-0

**AMALGAMATED INSTRUMENT CO PTY LTD**

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby  
 NSW 2077 Australia

Telephone: +61 2 9476 2244  
 Facsimile: +61 2 9476 2902

e-mail: sales@aicpl.com.au  
 Internet: www.aicpl.com.au