

# Large Digit Display – 100mm digit height LD-WT Load cell/Strain bridge input

Strain bridge transducers with mV/V output



## Features

- Visible up to 50m
- 4 and 6 digit 100mm LED models available
- 4, 5 and 6 digit 100mm EMD "flip" models available
- Load, weight, pressure display from ratiometric strain bridge transducer
- 4 or 6 wire input with 5, 10 or 15VDC excitation
- IP65 rated wall mount enclosure
- Dual 4-20mA analog transmission model available
- 4 configurable setpoint relays standard - capacity 240VAC, 5A, form C
- Pushbutton setup and calibration
- 2 year guarantee
- Display can be scaled as required without special tools
- Two calibration memories can be stored
- Remote programmer available for ease of setup
- Totalling function available for remote button (3 configurable remote inputs are standard)
- The auto-brightness feature for LED displays automatically varies the display brightness to suit the ambient light.

## Description

The LD-WT is designed for a wide range of applications with strain bridge inputs.

- 4 or 6 wire strain bridge transducers
- Selectable ranges 0.5mV/V to 100mV/V
- 5, 10 or 15VDC excitation voltage available (link selectable)

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 100 mm LED and EMD "flip" digit displays are housed in rugged, IP65 rated, powder coated zinc coated steel enclosures.

Shroud kits are available for the 100mm displays to provide some protection from direct light if required.



## Applications

The LD-WT with the 100mm displays will be ideal for those applications where load, pressure or weight indications need to be visible from a distance of up to 50m. Foundries, smelters, weighbridges, storage tanks, and silos are just some of the possible applications for these large digit displays. The display can be scaled to display in different engineering units such as metres (level), percentage (level, contents or capacity) or tonnes (load or weight).

Optional datalogging is available for the LD-WT strain bridge input monitor. The option offers 32K, 128K or 512K capacity. The feature includes Windows compatible software that allows graphical display and also allows the data to be formatted for use with other products such as spreadsheets. The feature requires the LD-WT to have serial communications installed.

LDWT100-3.2-0

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## Order Codes

Order Code	Display	Supply Voltage
LD-WT-ACH-100R4	4 digit LED	110 or 240VAC
LD-WT-ACL-100R4	4 digit LED	24, 32, 42 or 48VAC
LD-WT-DC-100R4	4 digit LED	12-24VDC isolated
LD-WT-ACH-100R6	6 digit LED	110 or 240VAC
LD-WT-ACL-100R6	6 digit LED	24, 32, 42 or 48VAC
LD-WT-DC-100R6	6 digit LED	12-24VDC isolated
LD-WT-ACH-100E4	4 digit EMD	110 or 240VAC
LD-WT-ACL-100E4	4 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E4	4 digit EMD	12-24VDC isolated
LD-WT-ACH-100E5	5 digit EMD	110 or 240VAC
LD-WT-ACL-100E5	5 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E5	5 digit EMD	12-24VDC isolated
LD-WT-ACH-100E6	6 digit EMD	110 or 240VAC
LD-WT-ACL-100E6	6 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E6	6 digit EMD	12-24VDC isolated

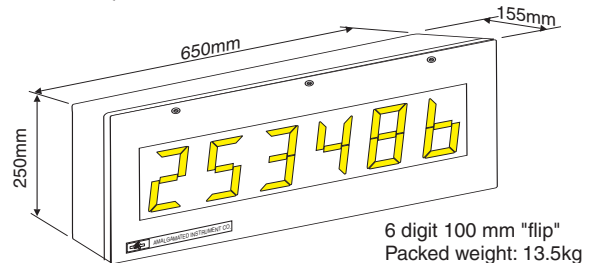
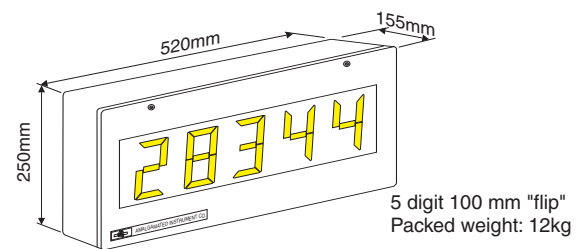
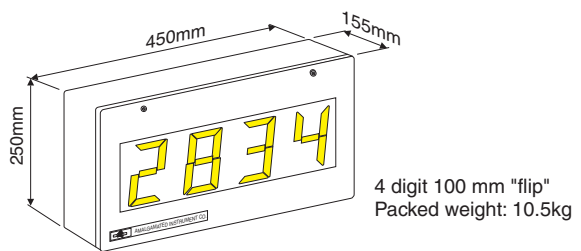
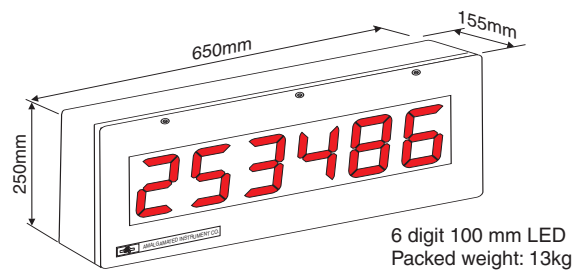
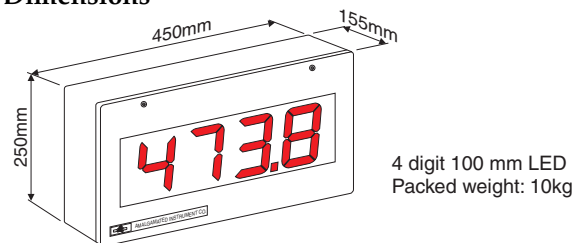
## Order Codes - dual analog retransmission models

Order Code	Display	Supply Voltage
LD-WT-ACH-100R4-AA	4 digit LED	110 or 240VAC
LD-WT-ACL-100R4-AA	4 digit LED	24, 32, 42 or 48VAC
LD-WT-DC-100R4-AA	4 digit LED	12-24VDC isolated
LD-WT-ACH-100R6-AA	6 digit LED	110 or 240VAC
LD-WT-ACL-100R6-AA	6 digit LED	24, 32, 42 or 48VAC
LD-WT-DC-100R6-AA	6 digit LED	12-24VDC isolated
LD-WT-ACH-100E4-AA	4 digit EMD	110 or 240VAC
LD-WT-ACL-100E4-AA	4 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E4-AA	4 digit EMD	12-24VDC isolated
LD-WT-ACH-100E5-AA	5 digit EMD	110 or 240VAC
LD-WT-ACL-100E5-AA	5 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E5-AA	5 digit EMD	12-24VDC isolated
LD-WT-ACH-100E6-AA	6 digit EMD	110 or 240VAC
LD-WT-ACL-100E6-AA	6 digit EMD	24, 32, 42 or 48VAC
LD-WT-DC-100E6-AA	6 digit EMD	12-24VDC isolated

## Options

Option Code	Description
LD-OPT-IW-232	RS232 serial comms, non-isolated
LD-OPT-IW-485	RS485 serial comms, non-isolated
LD4-1004-SHROUD	Shroud kit for 100R4 & 100E4 displays
LD4-1005-SHROUD	Shroud kit for 100E5 displays
LD4-1006-SHROUD	Shroud kit for 100R6 & 100E6 displays
Data logging options - Request separate brochure or download <a href="http://www.aicpl.com.au/brochures/dloadbr.pdf">http://www.aicpl.com.au/brochures/dloadbr.pdf</a>	

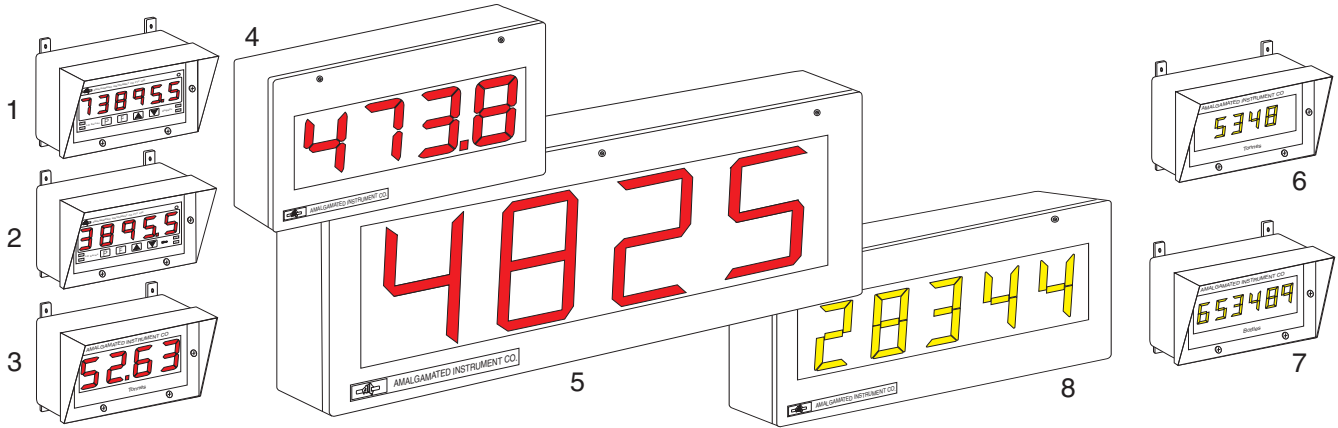
## Dimensions



## Technical Specifications

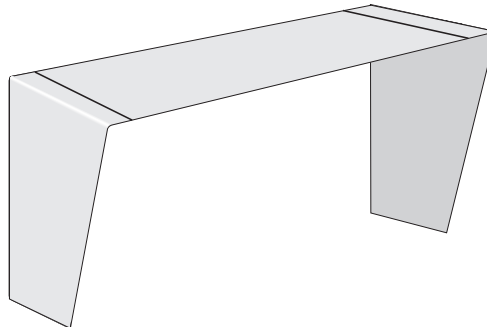
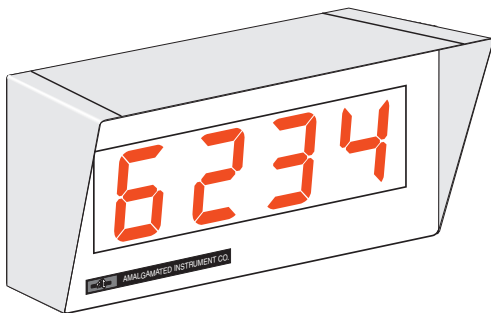
Input	4 or 6 wire load cell, pressure transducer or strain bridge with mV/V output
Accuracy	Up to 0.005% of full scale (alarms and display) dependant on sample rate, mV/V input and digital filter setting Analog retransmission better than 0.05% system accuracy
Sample rate	5 to 100 samples/second selectable
Microprocessor	MC68HC11 CMOS
Ambient temp	-10°C to 60°C
Humidity	5% to 95%
Outputs	4 x setpoint relays, form C, rated 5A at 240VAC (resistive load) optional dual analog retransmission
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
Optional model	Dual 4-20mA analog retransmission model available

## Displays available in Large Digit Series



No.	LED digit size	No of digits	No.	"FLIP" digit size	No of digits
1	38mm (1.5")	6	6	39mm (1.5") - selected models	4
2	45mm (1.8")	5	7	39mm (1.5") - selected models	6
3	57mm (2.3")	4	8	100mm (4")	4, 5 and 6
4	100mm (4")	4 and 6	Other sizes and styles of display are under development		
5	200mm (8")	4			

## Optional shrouds

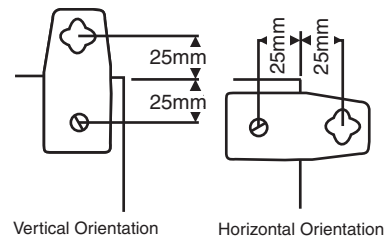


Shroud kits for 100mm displays consist of 2 side panels, a top plate (length is model dependant) and fixing hardware. The overhang of the shroud is 90mm for all models. The shrouds are of powder coated zinc coated steel to match the metal enclosures.

## Other applications available with large digit displays

- Analog input, process transmitters etc. 4-20mA, 0-1VDC, 0-10VDC, slidewire
- Rate, total, count, grand total from pulse input
- Temperature - RTD, thermocouple, 4-20mA
- Weighing - mV/V ratiometric loadcells
- Pressure measurement - mV/V ratiometric or analog transducers
- Liquid level measurement - mV/V ratiometric or analog transducers
- Serial input - RS232, RS485, Current loop
- Synchronous Serial Interface (SSI)
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Multifunction timer - elapsed time, stopwatch, etc.
- Time and Temperature

## Mounting brackets



Four mounting brackets are included with all models. The metal case 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 10mm 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.