Large Digit Display – 100mm digit height LD5-TR and LE5-TR ratemeter/totlaliser

The LD5-TR and LE5-TR with 100mm displays are be ideal for applications where rate and total indications need to be visible at a distance. The instrument can be used in rate, total or rate plus total modes with comprehensive alarm functions. LE5 model versions include Ethernet communications, datalogger memory and web page. High contrast versions, viewable even in bright sunlight are available in red, green, amber or white.

Display examples

4 digit 100mm Red LED

4 digit 100mm Green High Contrast (S/S Case)

6 digit 100mm Green High Contrast with colons

6 digit 100mm Red LED

Features

- Visible from 50 metres
- Standard brightness red LED
- High contrast daylight viewable versions now available in 4 or 6 digit red, green, amber or white LED
- Rate and/or total display from pulse input
- Totaliser can count up or down
- Up to 100kHz input frequency
- "Timeout" function for very low frequency input
- Compatible with a wide range of input sensor types with a pulse output
- IP65 rated wall mount enclosure, powder coated steel standard, stainless steel optional
- 4 configurable setpoint relays standard rated at 240VAC, 5A into a resistive load
- Remote reset or preset
- Pushbutton setup and scaling
- Remote inputs can be configured to one of a wide range of functions including zero, display hold, peak hold, etc.
- Programmable digital filter for rate display
- Ethernet with 8MB data logger memory and web page on LE5 models
- Isolated RS232/RS485 serial communications optionally available. Both RS232 and RS485 are fitted but only one at a time can be used
- 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, 57, 58mm and 200mm display models

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Specifications

Input:	Selectable types inc: NPN, PNP, switch contact, magnetic pickup, output from TTL, CMOS, square wave, Namur
Reset/preset input	Voltage free switch contact or up to 24VDC signal
Memory	Totaliser memory ferro ram stored, retention typically 45 years with no power
	Data logger memory stored in flash memory, retention typically 100 years with no power (LE5 model only)
Display update:	4 per second
Input Impedance	$1M\Omega$ standard or $12k\Omega$ in attenuated input mode
Input frequency:	100kHz max. in high frequency mode
Sensor supply	5 VDC or 12 or 24VDC, pushbutton selectable **(50mA max.)**
Ambient temp	-10°C to 60°C
Humidity	5% to 95%
Display types:	100mm 4 or 6 digit red LED
	100mm 4 or 6 digit red, green, amber or white high contrast LED
	See separate brochures for other display sizes
Power supply:	See order code table (type is factory configured)
Power usage:	DC supply:
	typically 300mA at 24VDC for 4 digit standard LED displays (1A peak),
	typically 450mA at 24VDC for 6 digit standard LED displays (1.5A peak),
	typically 600mA at 24VDC for 4 digit high contrast LED displays (1A peak),
	typically 900mA at 24VDC for 6 digit high contrast LED displays (1.5A peak),
	(plus current for sensor if on board supply is used)
Outputs (standard):	4 x relays, (1 x form C, 3 x form A), 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
Weight:	4 digit displays 10.5kg, 6 digit displays 13.5kg
Dimensions:	4 digit displays 450 x 250 x 155mm
	6 digit displays 650 x 250 x 155mm

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.
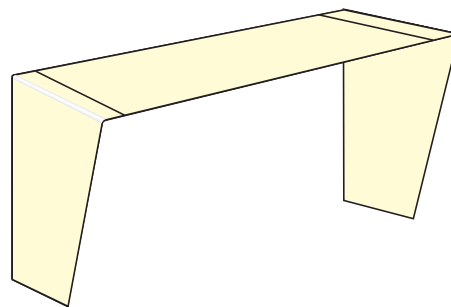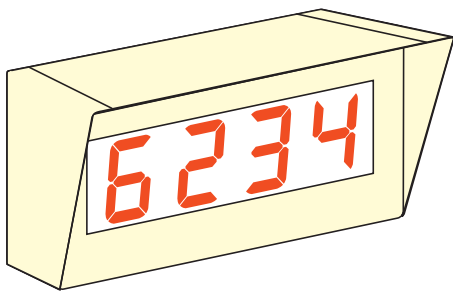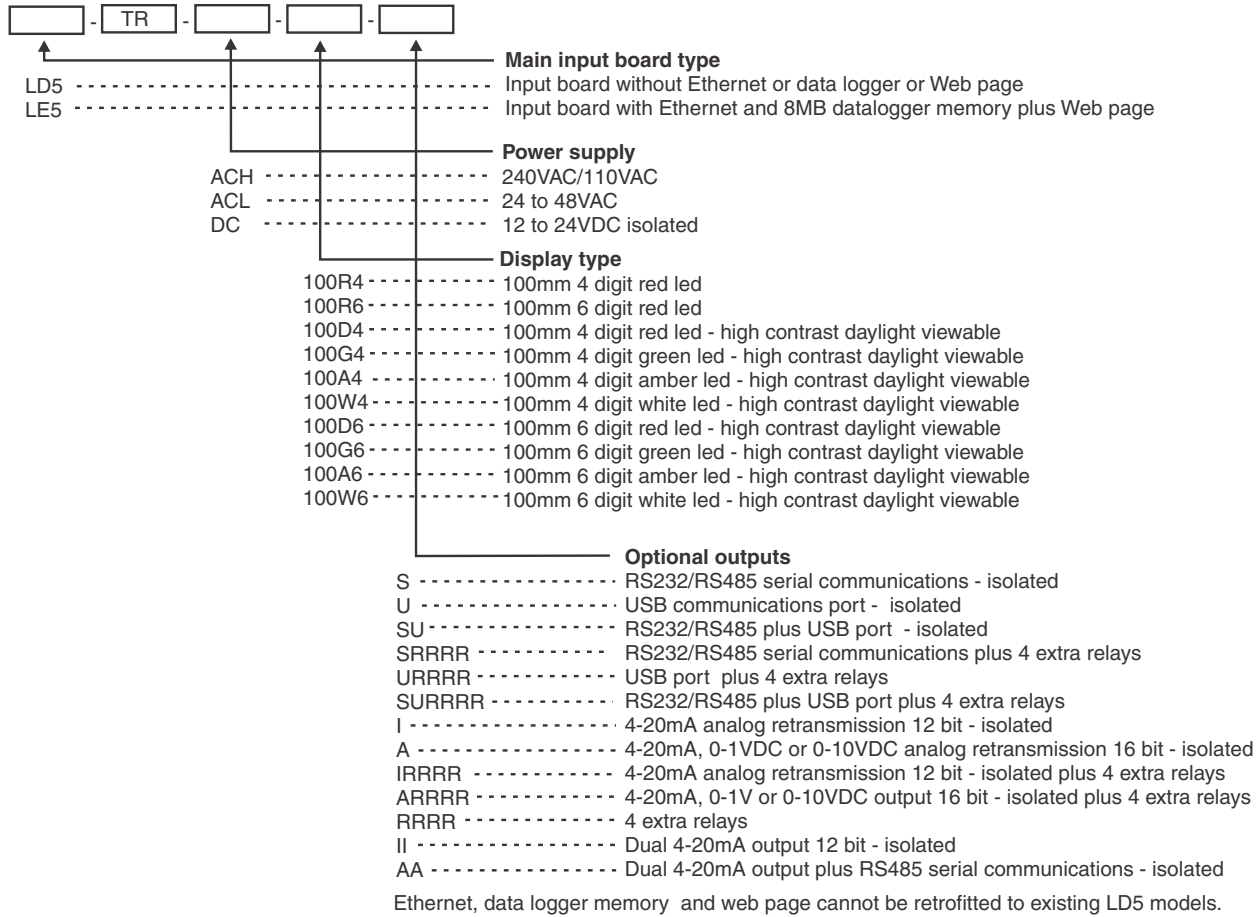
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Order codes for 100mm displays

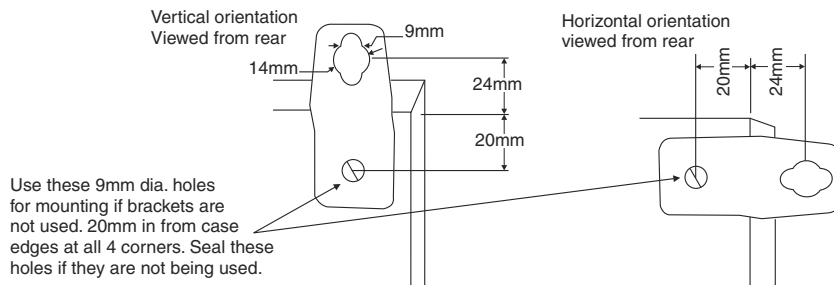The last sections is for optional items (if required).
Optional outputs are factory configured.

Main input board type

LD5	Input board without Ethernet or data logger or Web page
LE5	Input board with Ethernet and 8MB datalogger memory plus Web page

Power supply

ACH	240VAC/110VAC
ACL	24 to 48VAC
DC	12 to 24VDC isolated

Display type

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 green 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
100W6	100mm 6 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, data logger memory and web page cannot be retrofitted to existing LD5 models.

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.

Vertical orientation
Viewed from rear
9mm
14mm
24mm
20mm

Use these 9mm dia. holes for mounting if brackets are not used. 20mm in from case edges at all 4 corners. Seal these holes if they are not being used.

Horizontal orientation
viewed from rear
20mm
24mm

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