Large digit displays - 38, 45, 57 or 58mm digit height models

LD-SS Synchronous Serial Interface (SSI)

The LD-SS range of large digit displays is designed for use with a Synchronous Serial Input (SSI). The input type can be configured as binary or Gray Code coded. Calibration, alarm settings, decimal point etc are all carried out using the push buttons on the main board of the instrument (57mm and 58mm displays) or on the front panel (38mm and 45mm displays). High contrast versions, viewable even in bright sunlight are available in 38mm and 58mm digit hight in red, green, amber or white.

Displays

6 digit 38mm high red LED (visibility to 18m)

5 digit 45mm high red LED (visibility to 20m)
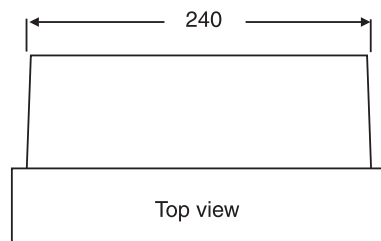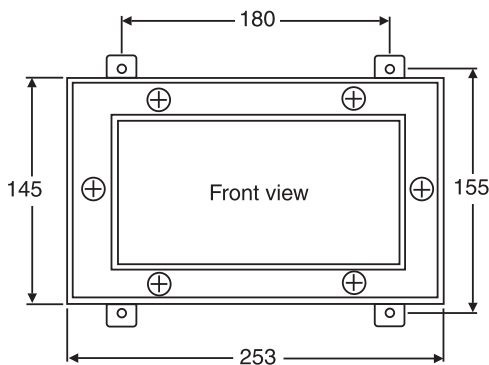
4 digit 57mm high red LED (visibility to 25m)

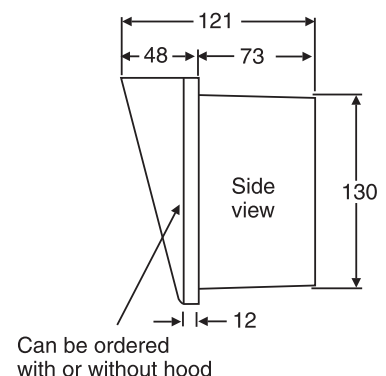4 digit high contrast 58mm high green LED (visibility to 25m)

Features

- Synchronous Serial Interface (SSI) input
- Up to 31 bits SSI binary or Gray code
- Display scalable to read in engineering units
- Pushbutton scaling and setup
- 6 x 38mm LED - visibility rating to 18m
- 5 x 45mm LED - visibility rating to 20m
- 4 x 57 and 58mm LED - visibility rating to 25m
- High contrast, daylight viewable 38 or 58mm versions in green, red, amber or white
- Can be used via model RM-BC or RM4-BC converters to display from non SSI Binary/BCD/Gray code sources
- Choice of normal (600kHz) clock rate or low (90kHz) clock rate for long cable runs
- IP65 rated wall mount enclosure
- 2 configurable setpoint relays standard rated at 240VAC, 5A into a resistive load, form A
- Panel mount kit available
- Pushbutton setup
- Flexible scaling methods
- Dual calibration memory allows switching of scaling via remote switch e.g. mm and inches
- Remote input can be configured to one of a wide range of functions including zero, tare, peak hold, etc.
- The auto-brightness feature for LED displays varies the display brightness to suit the ambient light
- 2 year guarantee
- See separate brochures for 39mm flip digit, 100mm LED and flip digit and 200mm display models

Front view

180
145
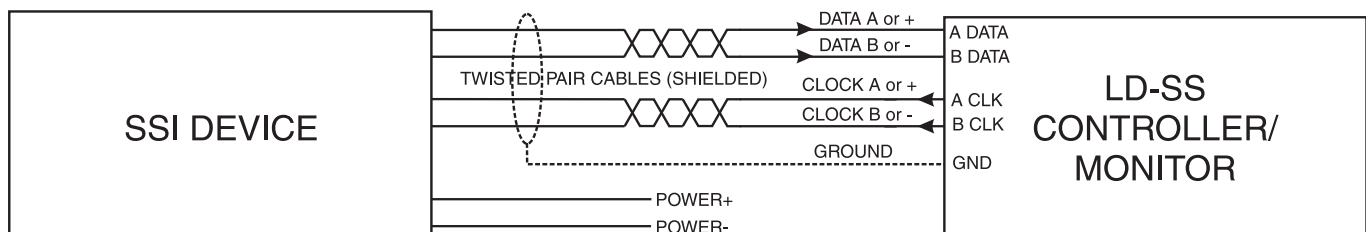155
253

Top view

240

All dimensions in mm

Side view

121
48
73
130
12

Can be ordered with or without hood

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Specifications

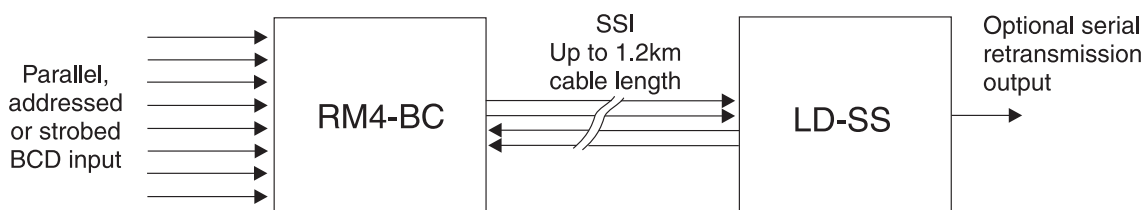|	
Input:	SSI - Synchronous Serial Interface
	Binary or Gray Code coded SSI input, progammable up to 31 bits
Microprocessor:	MC68HC11 CMOS
Ambient temp:	LED models -10°C to 60°C
Humidity:	5% to 95% non condensing
Display types:	38mm 6 digit red, green, amber or white LED with alarm annunciators and 4 way keypad
	45mm 5 digit red LED with alarm annunciators and 4 way keypad
	57mm red or 58mm 4 digit red, green, amber or white LED
	See separate brochures for other display sizes
Clock frequency	600 kHz or 90 kHz selectable
Power supply:	See order code table (type is factory configured)
Power usage:	AC supply 15VA max,
	DC supply typically 100mA at 24VDC for 38 & 45mm standard brightness,
	250mA at 24VDC for 57mm or 38 & 58mm high contrast
Outputs (standard):	2 x relays, 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:	1.3 kg
Dimensions:	See front page

Sensor to display wiring details

The maximum cable length is normally determined by the device/encoder being connected to the display. Consult the handbook for the SSI device used for details of maximum cable length. Note: Twisted pair shielded cable must be used for clock and data. A 24VDC sensor supply is provided, this is limited to 50mA maximum current, check to ensure this is sufficient for the the encoder used, if not then an external power supply will be required.

Connections via RM4-BC SSI converer

The display can be connected to standard BCD sources via the RM4-BC BCD to SSI converter. The BCD input may be presented in parallel, strobed or addressed form.
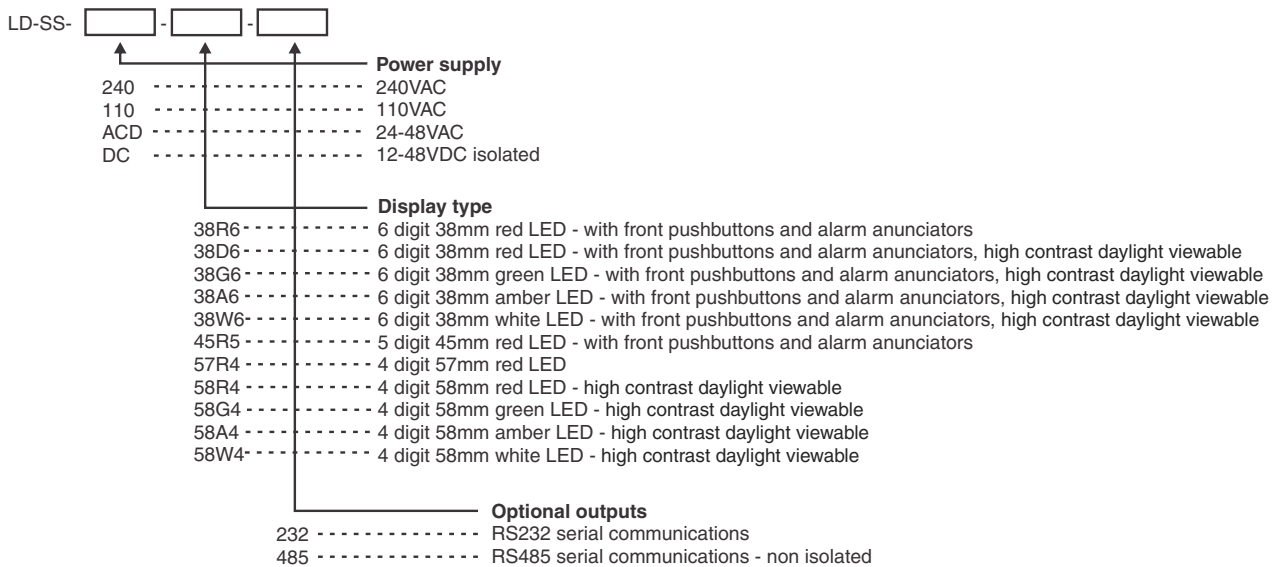

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LD-SS order codes for 38, 45, 57 or 58mm displays

LD-SS- ☐ - ☐ - ☐

Power supply
240 .... 240VAC
110 .... 110VAC
ACD 24-48VAC
DC .... 12-48VDC isolated

Display type
38R6 .... 6 digit 38mm red LED - with front pushbuttons and alarm anunciators
38D6 .... 6 digit 38mm red LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable
38G6 .... 6 digit 38mm green LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable
38A6 .... 6 digit 38mm amber LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable
38W6 .... 6 digit 38mm white LED - with front pushbuttons and alarm anunciators, high contrast daylight viewable
45R5 .... 5 digit 45mm red LED - with front pushbuttons and alarm anunciators
57R4 .... 4 digit 57mm red LED
58R4 .... 4 digit 58mm red LED - high contrast daylight viewable
58G4 .... 4 digit 58mm green LED - high contrast daylight viewable
58A4 .... 4 digit 58mm amber LED - high contrast daylight viewable
58W4 .... 4 digit 58mm white LED - high contrast daylight viewable

Optional outputs
232 .... RS232 serial communications
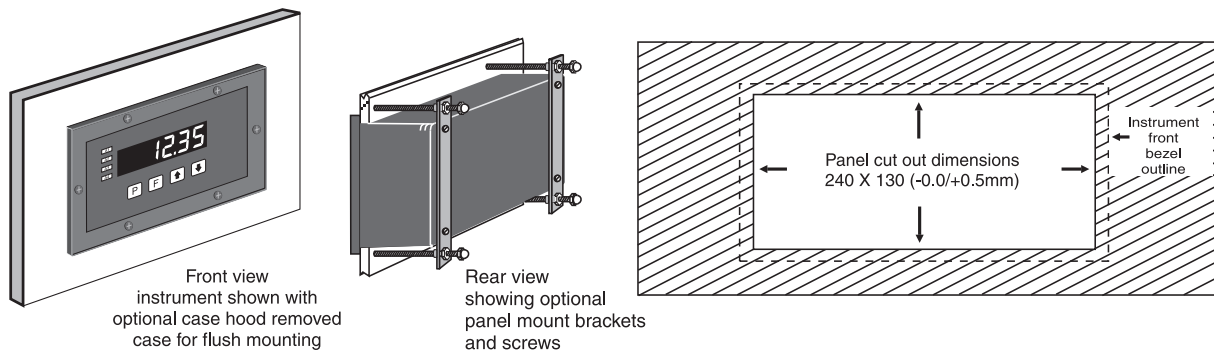485 .... RS485 serial communications - non isolated

Panel mounting

The instrument is provided with removable surface (e.g.wall) mounting tabs mounting. A panel mount kit is optionally available which allows the instrument to be mounted via a panel cut out. If required the instrument can be optionally supplied with the front hood removed to allow a more flush panel mount fitting.

Part number for panel mount kit: LD-MTG-PM-KIT
Part number for hood removal: LD-HOOD-REMOVAL

Front view
instrument shown with
optional case hood removed
case for flush mounting

Rear view
showing optional
panel mount brackets
and screws

Panel cut out dimensions
240 X 130 (-0.0/+0.5mm)

Instrument
front
bezel
outline

Applications/input types available with large digit display models

- Analog input, process transmitters etc. ±20mA, 4-20mA or ±2.5VDC or ±25VDC
- 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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