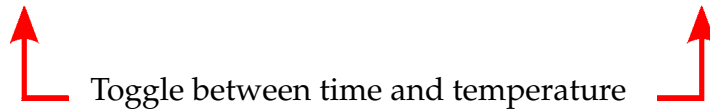# Large Digit Display – 200mm & 100mm digits
LD-RTT real time clock/temperature display

Toggle between time and temperature

200mm display shown

Features

- 12 hour, 24 hour or month and day display (6 digit 100mm display)
- Internal clock chip or 50Hz or 60Hz mains, optional high accuracy crystal or optional GPS synchronisation
- Pushbutton scaling and setup
- Display time for clock display and temperature display can be individually configured with automatic switching between displays
- Two setpoint relays supplied as standard
- Relays can be set for day/time switch on and duration operation and for normally open or normally closed operation. Each relay can be allocated more than one setpoint period (up to 32 total alarm periods can be set).
- Rugged, weatherproof, IP65 rated housing
- 2 year guarantee
- Master/slave operation using optional serial communications
- The auto-brightness feature for LED displays varies the display brightness to suit the ambient light.

Description

The LD-RTT displays time and temperature. The display duration for the real time and the temperature can be individually configured. For example, the time cam be displayed for 10 seconds and the temperature then be displayed for 8 seconds.

Clock synchronisation can be set to be from either the unit's internal clock generator, the 50Hz mains frequency, the 60Hz mains frequency, an optional high accuracy 10MHz crystal or optional GPS satellite receiver.

The temperature input is an LM335 solid state sensor which can be housed in an optional radiation shield. The shield protects the sensor from direct solar radiation and high winds yet allows enough airflow to provide a meaningful temperature reading.

The large digit display is equipped with an "autobrightness" feature. This adjusts the brightness of the display to allow for changes in ambient light. This feature will minimise "display glare" in low ambient light conditions.

The 200mm & 100mm LED digit displays are housed in rugged, IP65 rated, powder coated zinc coated steel enclosures.

LDRTT200-3.3-0

Technical Specifications

Retention	Display will blank during periods of no power. Battery backed clock chip keeps the time during those periods
Accuracy:	50 or 60Hz mains sync. - accurate to mains Internal clock chip - ± 30 seconds per month Optional high accuracy crystal - ± 3 seconds per month GPS - accurate to GPS system - ± 0.1 sec
Microprocessor	MC68HC11 CMOS
Ambient temp	-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

Order Codes

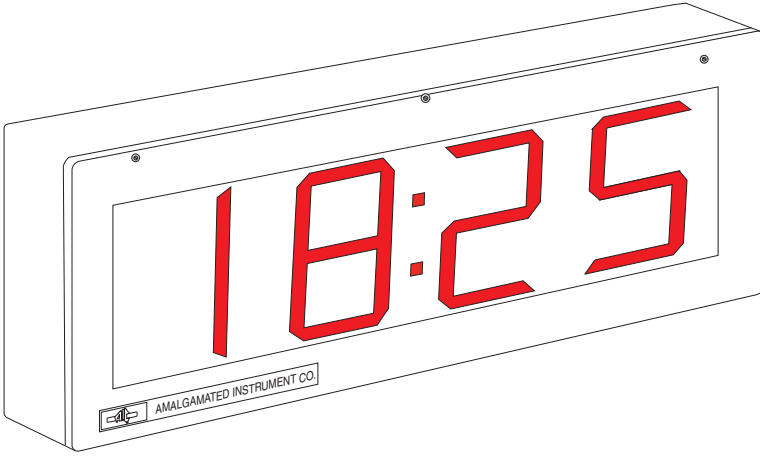| Displays with 100mm high digits		
Order Code	Display	Supply Voltage
LD-RTT-ACH-100R4C	4 digit LED	110 or 240VAC
LD-RTT-ACL-100R4C	4 digit LED	24, 32, 42 or 48VAC
LD-RTT-DCN-100R4C	4 digit LED	24VDC non-isolated
LD-RTT-DC-100R4C	4 digit LED	12-24VDC isolated
LD-RTT-ACH-100R6C	6 digit LED	110 or 240VAC
LD-RTT-ACL-100R6C	6 digit LED	24, 32, 42 or 48VAC
LD-RTT-DCN-100R6C	6 digit LED	24VDC non-isolated
LD-RTT-DC-100R6C	6 digit LED	12-24VDC isolated
Displays with 200mm high digits		
Order Code	Display	Supply Voltage
LD-RTT-ACH-200R4C	4 digit LED	110 or 240VAC
LD-RTT-ACL-200R4C	4 digit LED	24, 32, 42 or 48VAC
LD-RTT-DCN-200R4C	4 digit LED	24VDC non-isolated
LD-RTT-DC-200R4C	4 digit LED	12-24VDC isolated

Temperature sensor & optional shield

Order Code	Description
P-LMQ3SA-1	LM335 sensor with junction head
WS-MM-306-TPW	Optional radiation shield

Options

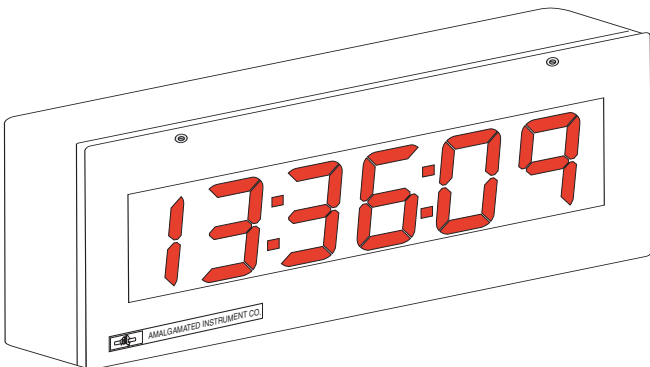| Option Code	Description
LD-OPT-TR-232	RS232 serial comms, non-isolated
LD-OPT-TR-485	RS485 serial comms, non-isolated
LD-2004-SHROUD	Shroud for 200R4 displays
LD4-1004-SHROUD	Shroud for 100R4 displays
LD4-1006-SHROUD	Shroud for 100R6 displays

Dimensions

4 x 200mm digit display	
Length	850mm
Height	360mm
Depth	155mm
Weight	13kg (packed)

4 x 100mm digit display	
Length	450mm
Height	250mm
Depth	155mm
Weight	10kg (packed)

6 x 100mm digit display	
Length	650mm
Height	250mm
Depth	155mm
Weight	13kg (packed)