

DTM 910

LCD Type Pt100 Temperature Indicator

The DTM 910 will give an accurate direct temperature reading in either °C or °F from a 2, 3 or 4 wire Pt100 thermistor*. Simple single step calibration is achieved using a 20-turn potentiometer which allows sensitive adjustment. The meter is housed in a robust carrier which can be bolted in place or panel mounted using the low profile bezel, window and clips provided. The DTM 910 can be configured using jumper links on the rear to display the temperature in Fahrenheit or Celcius and to flash those units at regular intervals if required. The temperature displayed is auto-ranged to take advantage of the meter's full resolution.

* For maximum accuracy we recommend a 4 wire class A Pt100 sensor.

- 19mm (0.75") Digit Height
- Simple Connection
- LED Backlighting
- Simple Single Step Calibration



CALIBRATION

Calibration is achieved by adjusting the display to correspond with a known accurate temperature.

Jumper Links		
Name	Open	Closed
°C/°F	Centigrade	Fahrenheit
Symbol	Off	On

Standard Meter Sensor	Stock Number DTM 910 PT-TYPE PROBE			
Specification	Min.	Typ.	Max.	Unit
Power supply voltage (V+ to V-)	4	5	5.5	V
Operating temperature range	0		50	°C
Supply current		2.5		mA
Supply current with backlighting		55		mA
Ranges	Resolution		Typical Accuracy	
Range 1: -200°C to +200°C	0.1°C		±0.5°C *	
Range 2: -200°C to +850°C	1.0°C		±1.0°C *	
Range 3: -200°F to +200°F	0.1°F		±1°F *	
Range 4: -328°F to +1562°F	1.0°F		±2°F *	

* Re-calibrate periodically to ensure maximum accuracy.

CONNECTOR SOURCING GUIDE

METHOD Screw Terminals - No Connector Required

SAFETY

As the Pt100 is a passive device, no voltages should be applied to the input terminals.

DIMENSIONS All dimensions in mm (inches)

Panel cut-out 72 x 40 (2.83 x 1.57)
Maximum panel thickness 3mm (0.12).

a. 1.0 (0.04)
b. 2.0 (0.08)
c. 6.5 (0.26)
d. 11.5 (0.45)
e. 13.0 (0.51)

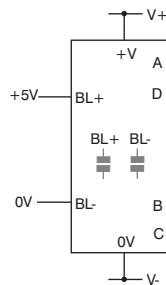
ON-BOARD SOLDER LINKS

SCREW TERMINAL FUNCTIONS

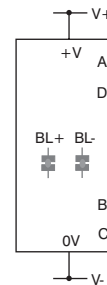
- A } Pt100 probe inputs (see schematic)
- B }
- C }
- D }
- +V Positive power supply connection.
- 0V Negative power supply connection.
- BL+ Positive power supply for backlighting.
- BL- Negative power supply for backlighting.

BACKLIGHTING

There are two ways to power the LED backlight. Either use a 5V ($\pm 10\%$) supply on BL+/BL- or use the internal meter 5V supply.

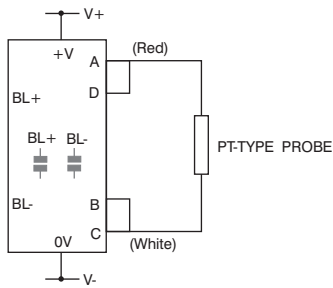


With external backlight supply.

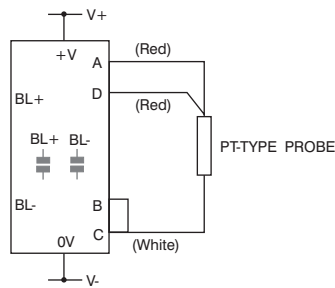


With internal (continuous) backlight Supply.
SOLDER LINKS BL+ and BL-

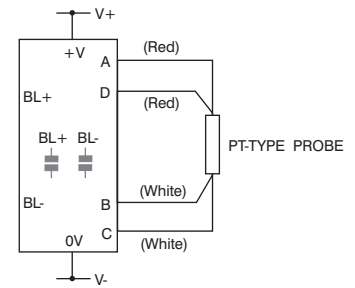
SENSOR CONNECTION



2 wire connection.



3 wire connection.



4 wire connection.

PANEL FITTING

