

DM665TM PROBE MOUNTED TEMPERATURE DISPLAY

- > **Pt100 OR THERMOCOUPLE INPUT**

- > **BATTERY POWERED**

- > **PUSH BUTTON CONFIGURATION**

- > **MAX MIN BUTTONS**

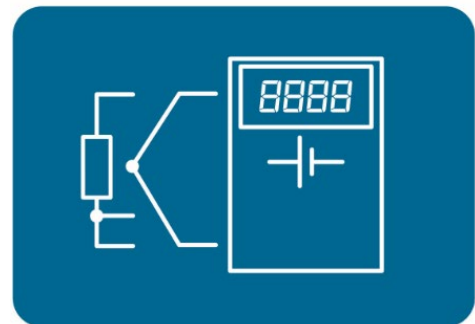
- > **ADJUSTABLE SAMPLE RATES**

> **INTRODUCTION**

The DM665TM accepts Pt100 or Thermocouple temperature sensors and displays the sensor temperature in °C or °F on a 6-digit LCD display.

It is an ideal alternative to bi-metal thermometers offering higher accuracy.

The device is easily programmable via a push button located inside the stainless-steel housing.



BATTERY POWERED

The instrument is powered by two AA batteries. The product is supplied with 1.5 V AA alkaline batteries. This will give the DM650TM a minimum battery lifetime of over one year. Used with Lithium Energizer L91 batteries (not supplied), the battery lifetime can be extended to over 5 years. Battery lifetime is dependent on the ambient operating temperature range and the sample rate selected.

MAXIMUM and MINIMUM VALUE RECALL

The maximum and minimum temperature readings can be displayed by using the two front panel buttons.

USER OFFSET

The user offset allows the temperature reading to be offset by +/- 10.0 temperature units. This allows compensation for any temperature probe error.

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INPUT RTD (3 Wire)		SPECIFICATIONS @20°C
Type	Range	Accuracy/stability
Pt100 (IEC)	(-200 to 850) °C	±0.2°C ±0.05% of reading (plus, sensor error)
Thermal drift	0°C at 20°C	Typically, 0.01 Ω/°C Example Pt100 0.03°C

INPUT Thermocouple (T/C)		SPECIFICATIONS @20°C
Type	Range	Accuracy/stability
K	(-150 to 1370) °C	±0.1% of full scale ±0.5°C ± CJ error (plus, sensor error)
J	(-200 to 1200) °C	
N	(-180 to 1300) °C	
E	(-260 to 1000) °C	±0.2% of full scale ±0.5°C ± CJ error (plus, sensor error)
T	(-270 to 400) °C	
R	(0 to 1760)°C	±0.1% of full scale ±0.5°C ± CJ error (plus, sensor error) over range (800 to 1760)°C
S	(0 to 1760)°C	
Thermal drift	0°C at 20°C	Typically, ±5 uV/°C

COLD JUNCTION (T/C correction)		SPECIFICATIONS @20°C
Type	Range	Accuracy/stability
Thermistor 10K Beta 3380	(-30 to 70) °C	±0.2°C
Thermal drift	0°C at 20°C	±0.05°C/°C

DISPLAY	
Type/options/function	Description
Display height	15.8 mm non-backlit
Display units	°C or °F
Display resolution	0.0 or 0.00 (Note 0.00 resolution temperature units not displayed).
Sample rate	User-set 5, 10, 30, 60, seconds.
Offset	User-set ±10.0 temperature units
Display information options	6 digits, 14 segment input value plus sensor error, low battery Maximum, Minimum.

FRONT PANEL PUSH BUTTON USER INTERFACE	
Buttons	Description
Max and Min	Display Maximum and Minimum value and reset values

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CONFIGURATION PUSH BUTTON USER INTERFACE	
Function	Description
Select Sensor	Pt100, TC types K, J, N, T, R, S
Select Sample Rate	5, 10, 30, 60 seconds
Enter Offset	±10.0 temperature units
Select Temperature Units	°C or °F

GENERAL				
Function	Description			
Battery	2 x (AA 1.5 V alkaline) or (AA 1.5 V lithium* ¹)			
Battery life @ 20.0 °C typical				
Sample Rate	5 Seconds	10 Seconds	30 Seconds	60 Seconds
Alkaline	1 Year +	1.5 Years +	3 Years +	3 Years +
Lithium	2 Years +	3 Years +	4 Years +	5 Years +
* ¹ Lithium Energizer L91 Optional				

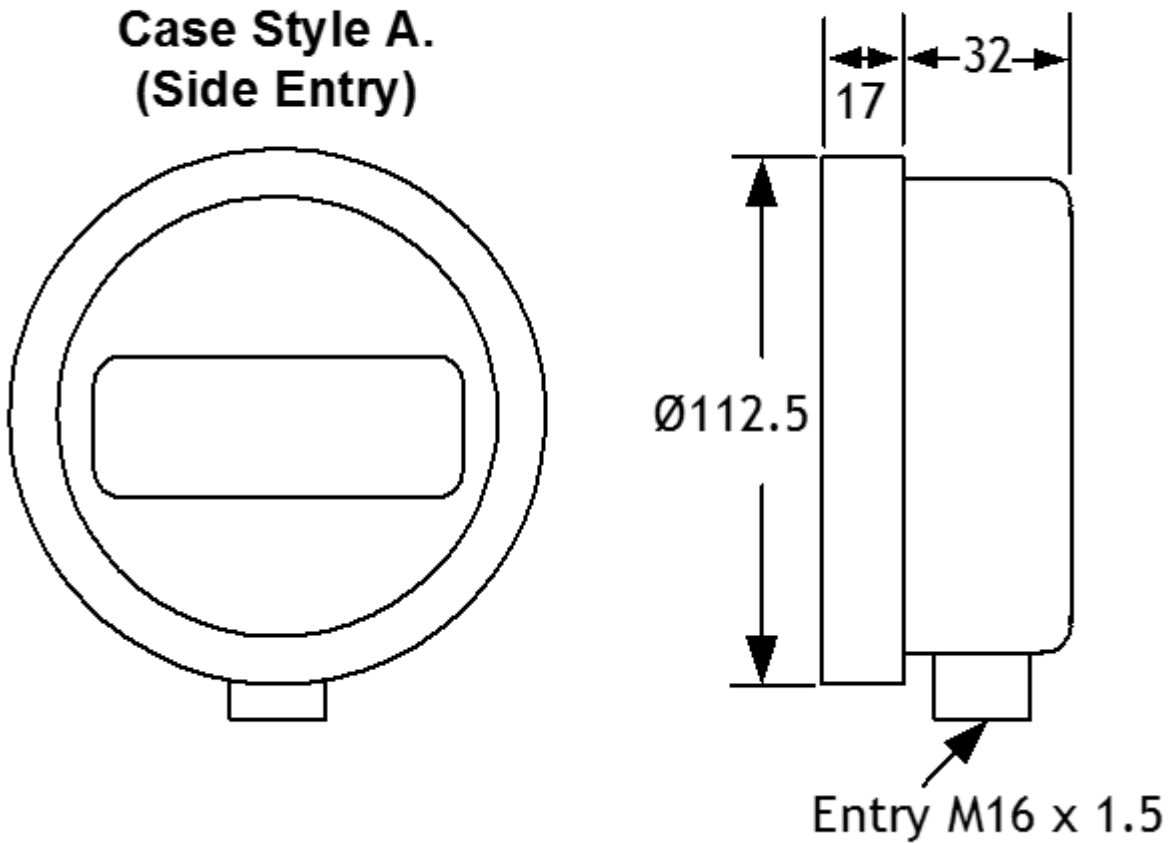
ENVIRONMENTAL	
Function	Description
Ambient temperature	Operating/storage (-15 to 40) °C (Alkaline) Operating/storage (-25 to 60) °C (Lithium Energizer L91)
Ambient humidity	Operating/storage (10 to 90) %RH non-condensing
Protection	IP65, sensor/probe entry must be sealed to IP65 to maintain

MECHANICAL	
Enclosure	Stainless steel, side entry for sensor/probe
Case entries	1x M16 female thread
Front bezel diameter	113 mm
Weight (approximate)	540 g
Input sensor	Two-part screw connector

APPROVALS	
EMC	BS EN 61326: Note - Sensor input wires to be less than 3 m to comply
Ingress Protection	BS EN 60529
RoHS	Directive 2011/65/EU incorporating RoHS 3 Amendment Directive EU 2015/836
RoHS	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulation 2021

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(All Dimensions in mm)



ORDER CODE	
DM665TM/A	Supplied with 2 x 1.5 V AA alkaline batteries
DM665TM/NB	Supplied without batteries
DM665TM/L	Supplied with 2 x 1.5 V AA lithium batteries

To maintain full accuracy annual calibration is required contact support@status.co.uk for details.
The data in this document is subject to change. Status Instruments assumes no responsibility for errors.

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