

DM640TC SENSOR/WALL MOUNTED TEMPERATURE DISPLAY

- > THERMOCOUPLE INPUTS
- > BATTERY POWERED LCD DISPLAY
- > PUSH BUTTON CONFIGURABLE
- > IP67 ENCLOSURE
- > DM640XTC ATEX OPTION

> INTRODUCTION

The DM640TC battery powered indicator accepts a range of thermocouple inputs and indicates the temperature on a 4-digit LCD display.

The sensor type is selected from a simple to use menu system which is navigated using three push buttons located on the rear of the display. This feature enables the user to easily configure the device in the field without the use of any other equipment.

The DM640TC is rated to IP67. There are several mounting options including rear and side probe mounting as well as a wall mounting version. A stainless steel housing for the DM640TC is also available.

> FEATURE HIGHLIGHTS

BATTERY POWERED

The instrument is powered by a single AA 3.6 V lithium battery. The battery life is 1 year minimum.

ATEX

An ATEX version is available for use in hazardous gas and dust areas (ABS housing only).

ADJUSTABLE RESOLUTION

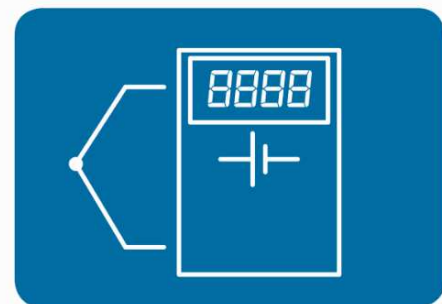
Display resolution to (1, 0.1 or 0.01) °C

SENSOR CORRECTION

The DM640TC sensor correction function via the push buttons allows for close matching to a known reference sensor eliminating possible sensor errors.

TEMPERATURE UNITS

The DM640TC can be programmed to display in either °C or °F



DM640TC SENSOR/WALL MOUNTED TEMPERATURE DISPLAY

INPUT		SPECIFICATIONS @20 °C
Thermocouple		
Type	Range	Accuracy/ stability
K	(-200 to 1370) °C	±0.1% of full scale ±0.5 °C ± CJ error (plus, sensor error)
J	(-70 to 180) °C	
N	(-180 to 1300) °C	
E	(-200 to 1000) °C	
L	(-100 to 600) °C	
T	(-210 to 400) °C	±0.2% of full scale ±0.5 °C ± CJ error (plus, sensor error)
R	(- 10 to 1760) °C	±0.1% of full scale ±0.5 °C ± CJ error (plus, sensor error) Only over range (800 to 1760) °C
S	(- 10 to 1760) °C	
B	(0 to 1800) °C	
Thermal drift	Zero (input range at 4 mA)	±0.02 °C / °C
	Span (input range at 20 mA)	±0.01 °C / °C

COLD JUNCTION (CJ)		SPECIFICATIONS @20 °C
Type	Range	Accuracy/ stability
Thermistor	(-30 to 70) °C	±0.2 °C
Thermal drift	0 °C at 20 °C	±0.05 °C / °C

DISPLAY	
Type/ options/ function	Description
Display value	4 digits in °C or °F adjustable resolution
Display height	8.5 mm non-backlit
Low battery	Display warning
Operation mode	Run time or programming

PUSH BUTTON CONFIGURATION USER INTERFACE		
Type/ options/ function	Description	Notes
Temperature units		°C, °F
Sensor configuration	Select sensor type Trim sensor offset	Thermocouple list °C, °F
Display resolution		1, 0.1, 0.01, 0.001
Configuration menu time out		60 s, 1 hr
Passcode	Menu lockout	4-digit number

GENERAL	
Function	Description
Update rate	5 seconds
Battery	1 x (AA 3.6 V lithium)
Battery life	1-year minimum

ENVIRONMENTAL	
Function	Description
Ambient temperature	Operating (-10 to 70) °C
DM640X ATEX version	Operating (-10 to 50) °C
Ambient humidity	Operating/storage (10 to 90) %RH non-condensing
Protection	IP67, cable/ suitable probe entries must be used to maintain IP67

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CONNECTIONS

Function	Description
Input sensor	Connection block
Maximum wire size	1.5 mm ²

MECHANICAL

Function	Description
Enclosure	ABS, grey base, grey clamp ring
Display cover	Polycarbonate, clear
Case entries	Base and side entry options see ORDER CODES below
Weight (approximate)	150 g (without probe)

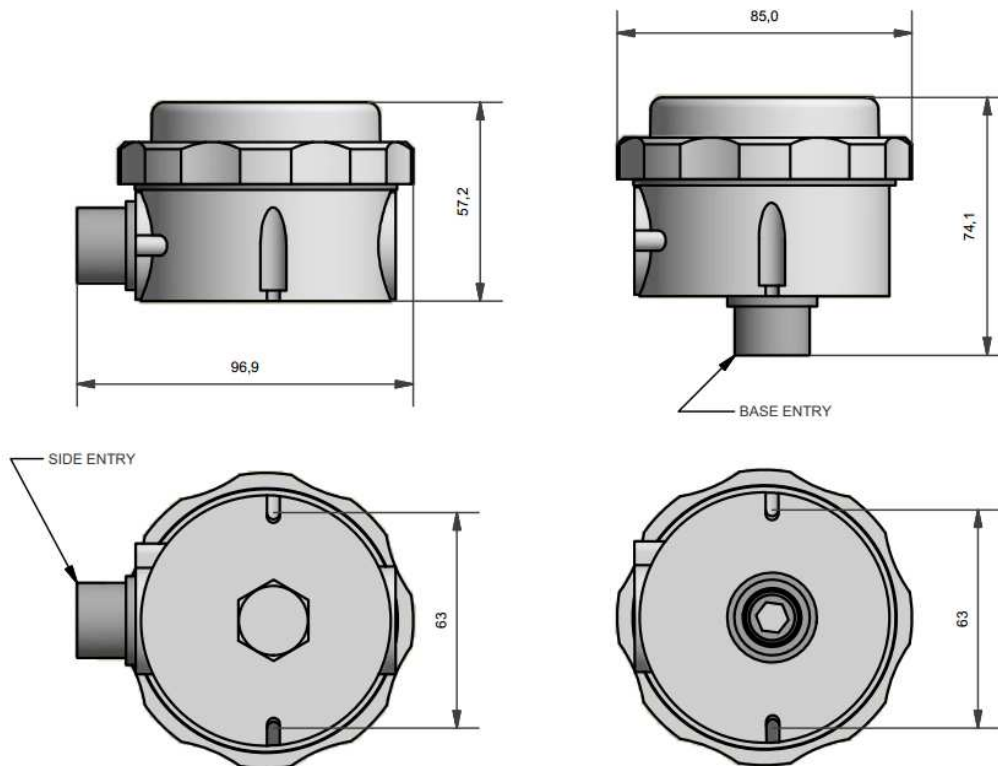
APPROVALS

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
ATEX DM640/X	II 1 G D EEx ia IIC T4

MECHANICAL

1 x side entry

1 x base entry



Dimensions in mm

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DM640TC ORDER CODE							
For ATEX add X		Input type	Case type				Entry options
DM640		TC	A	00	Side entry option	00	20 = M20 24 = M24 BP = ½ "BSP NT = ½ "NPT
DM640		TC	C	Base entry option	00	00	
DM640/ = non ATEX version DM640/X = ATEX version		A = side entry sensor C = base entry sensor					
Example, non ATEX , 1 x M20 side entry							
DM640		TC	/A	/00	/20	/00	
For further options please contact sales@status.co.uk							

ACCESSORIES	
Battery AA 3.6 V lithium	Refer to sales@status.co.uk
Calibration certificates	Refer to sales@status.co.uk
Sensor options	Refer to www.status.co.uk

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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