

# BATTERY POWERED DIGITAL THERMOMETERS

## DM600 SERIES

- BATTERY POWERED
- RTD OR TC INPUT OPTIONS
- PUSH BUTTON CONFIGURABLE
- 4 DIGIT DISPLAY
- HOUSING ABS PLASTIC OR STAINLESS STEEL
- SEALED TO IP67
- ATEX APPROVED IN ABS HOUSING



## INTRODUCTION

The DM600 series of battery powered indicators accepts either an RTD (DM640P) or a Thermocouple (DM640TC) input. Each device shows the temperature on a 4 digit LCD display.

The unit is microprocessor based. The sensor type is selected from a simple to use menu system which is navigated by the use of 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 DM640P and DM640TC are sealed into a cap as pictured above. There are several mounting options including the SCH4 series of enclosures and a stainless steel option, the SCH15

ATEX versions are available for use in hazardous dust and gas areas.

## SPECIFICATION @20 °C

<b>General</b>	
Display	4 digit LCD
Ambient	DM640 (-10 to 70) °C DM640X(-10 to 50) °C
Battery Type	3.6 V Lithium AA replaceable
Battery Life	1 year minimum
Battery Alarm	Via display
Connection	3 terminal screw block
Configuration	Security Passcode protected
I.S Approval	ATEX II 1GD EEx ia IIC T4 (Option) ABS Housing only
<b>DM640P</b>	
Accuracy	± 0.2 °C ± 0.1 % of reading
Measuring Range	(-100 to 800) °C
<b>DM640TC</b>	
Accuracy	± 0.1 % of full scale ± 0.5 °C
Measuring Range	(-200 to 1800) °C
<b>Mechanical</b>	
Connections	3 Way terminal block
Maximum Wire Size	1.5 mm <sup>2</sup>
Environmental Rating	IP67 when in appropriate enclosure

DM640 SHOWN IN A SCH15 ENCLOSURE

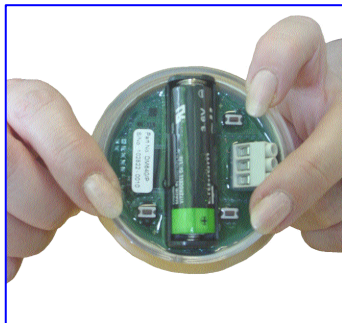


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## CONFIGURATION

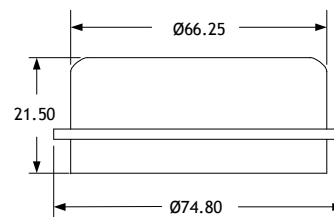
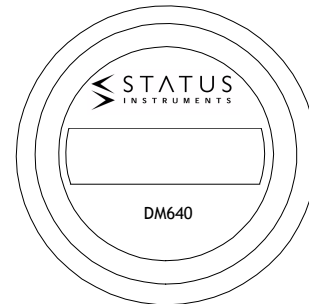
The pictures below show the operation of the easy to use configuration menu. By pressing the three buttons, the user gains access to all configuration parameters including the following:

- Security passcode protection.
- Sensor type; K, J, T, R, S, E, L, N or B for DM640TC; Pt100 or Ni120 for DM640P .
- Temperature units; °C or °F.
- User offset; intended to offset the displayed temperature by a user-configurable amount.
- Display resolution; 1, 0.1, 0.01 or 0.001 °C.
- Configuration menu time out adjustment.
- Low battery alarm.
- Reset to factory default.
- Easy on-site re-calibration when required.
- Pt100 offset/scale adjustment; intended to adjust BS EN 60751 to mimic other standards such as JISC 1604.



## MECHANICAL DETAILS

(All dimensions in mm)



SCH4 Enclosure Mounting



ORDER CODE

MODEL /

DM640 Standard Version  
DM640X I.S Version with SCH4 Head

Pt100/Ni120 Input P  
Thermocouple Input T

SUITABLE ENCLOSURE (TO BE ORDERED SEPARATELY)

SCH4 IP67ABS Plastic  
SCH15 IP67 Stainless Steel