

LOOP POWERED LED INDICATOR

DM7001

- > (4 TO 20) mA LOOP POWERED
- > 4 DIGIT LED DISPLAY
- > 10 YEAR WARRANTY
- > CUSTOM LINEARISATION
- > FULLY PROGRAMMABLE BY PUSH BUTTONS
- > ATEX APPROVAL



INTRODUCTION

The DM700 series is a family of Loop Powered Indicators which incorporate a high efficiency LED display. ATEX versions are available for use in hazardous areas.

Small and compact, the DM700 is encapsulated in a clear polycarbonate cap as pictured above. There are several mounting options including the SCH4 series of enclosures. Alternatively it is available with a choice of mountings to fit in other standard connecting heads.

The unit is microprocessor based. Set up is achieved by means of three push buttons located on the underside of the module following a simple menu structure. The (4 to 20) mA Loop Powered version can have a number of standard linearisations applied, such as square root, or a custom characteristic can be entered.

SPECIFICATIONS @20 °C

GENERAL

Display	4 digit LED
Ambient	(-20 to 75) °C
I.S (Approval pending)	ATEX II 1G EEx ia IIC (option)
Ambient Storage	(-50 to 85) °C
Ambient Humidity	(10 to 90) % RH
EMC Emissions	BS EN61326
EMC Immunity	BS EN61326
Input	(4 to 20) mA input
Range	-1999 to 9999 DP selectable in any position
Linearisation	Linear, Square root, Power ³ / ₂ , Power ⁵ / ₂ , User
User Characteristic	Up to 20 pairs by st. line interpolation
Accuracy	± 0.01 % FS
Hart Transparent	Yes
Power	Loop powered
Loop Drop	< 4.0 V @ 20 mA

MECHANICAL

Connections	Screw terminal
Maximum Wire Size	1.5 mm ²
Environmental Rating	IP67 when in appropriate enclosure

DM7001 shown in a SCH4 Enclosure



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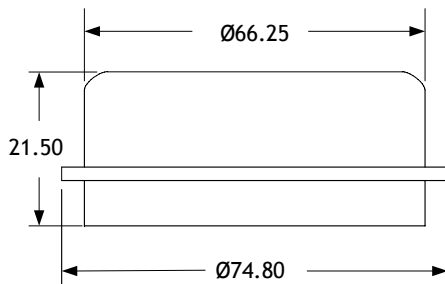
CONFIGURATION

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.
- Linearity type; linear, $\sqrt{\quad}$, $X^{3/2}$, $X^{5/2}$ or user interpolation.
- Input scaling; the displayed PV values that correspond to the mA input signal.
- Input scaling type; manual (user edits (4 to 20) mA PV values via keypad) or automatic (user applies hi/lo mA signals, then device performs auto-scale).
- User interpolated data; up to 20 co-ordinate pairs.
- User offset; intended to offset the displayed PV 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.

MECHANICAL DETAILS

(All dimensions in mm)



SCH4 Enclosure Mounting



ORDER CODE

MODEL /

DM700 Standard version
DM700X IS Version

(4 to 20) mA Input

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ACCESSORIES

ACC16-01 Mount Kit for SCH16

SUITABLE ENCLOSURES (TO BE ORDERED SEPARATELY)

SCH4 IP67 ABS Plastic
SCH15 IP67 Stainless Steel (Pending)
SCH16 IP67 Aluminium Exd (Pending)