

PLUG- IN DISPLAY



## DESCRIPTION

The PM1000 series is a 4 digit LED plug-on display for use with transmitters with 4-20mA 2 wire output and fitted with DIN43650 connector. It provides a local display for a multitude of applications.

The plug-on display simply fits between the transmitter plug and connecting cable socket and is powered from the 4-20mA current loop signal of the transmitter. No additional power source is required.

Display settings are stored in non-volatile EEPROM, and can be easily modified through the menu using two programming buttons. Set-up parameters (zero, span, decimal point position, filter, and set-point level) can all be reprogrammed and stored and retained when power is removed. The display assembly inside the enclosure can be rotated through 90° steps, which will suit any mounting angle and simply installation.

Model PM1000 is the standard version providing a 4 digit LED display. An integral opendrain switch output is provided on model PM1001. This can be programmed to open or close at a set-point level. The output can then by used to trigger an alarm or provided external controller.

Typical applications for the plug-on display include use on pressure, temperature, level, RH, or flow transmitters for local readout, alarm activation or control.

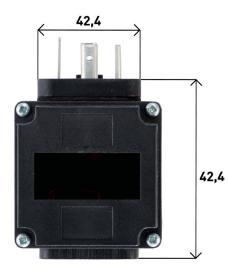
Adaptations for custom connectors can be made and available on request.

- INDICATION RANGE -999 TO 9999
- PLUG ON TO ANY TRANSMITTER WITH 4-20mA OUTPUT
- FITS TO DIN 43650 CONNECTOR
- BRIGHT LED DISPLAY
- SET POINT OPTION
- EASY TO USE
- PROVIDES LOCALISED
  DISPLAY





#### DIMENSIONS (in mm)



ELECTRICAL CONNECTION			
Pin No.	PM1000/2	PM1001	
	+Supply	+Supply	
2	4-20mA Return	4-20mA Return	
3	Not connected	open drain (P type switch)	
	Connected through to transducer plug		

#### **ORDERING INFORMATION**

OUTPUT	Model No.
Standard plug-in display	PM1000
Plug-in display with single set point	PM1001

DISCLAIMER : ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice.All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards.

## **SPECIFICATION**

#### DISPLAY

4 digit red LED display, 7mm digit height.

#### **DISPLAY OUTPUT RANGE**

-999 to 9999

#### **INPUT SIGNAL**

4-20mA, 2 wire current loop.

#### **DISPLAY CALIBRATION**

Factory set to display 4.00 to 20.00 for 4-20mA input.

## ACCURACY

0.2% of full-scale input +/- 1 digit

#### **POWER SUPPLY VOLTAGE:**

Requires 5 V or less from loop supply.

#### **ALLOWED LOOP CURRENT**

Maximum 60mA. Above this automatic circuit protection is activated.

#### **DISPLAY UPDATE RATE**

300mS to 25.5 S, adjustable filter setting from menu.

### **OPEN DRAIN SWITCH OUTPUT**

Model number PM1001 only: P type MOSFET switch. Maximum current source: 90mA, with automatic circuit protection.

#### PROGRAMMING

Via two press buttons, menu assisted. Access to the programming buttons is made by removing front cover.

#### **MENU SELECTION**

Zero adjustment: -999 to 9999 Span adjustment: 0 to 9999 Decimal point: 3 positions or off Filter: 0.3 to 25.5 second Over-range: On/Off Setpoint: -999 to 9999 Setpoint direction: Up/Down Settings stored in Non-volatile EEPROM

## **TEMPERATURE RANGE**

Operating: -10°C to + 60°C Storage: + 5°C to + 40°C

#### **CASE MATERIAL**

Moulded ABS plastic, Red Acrylic display widow, Nitrile seal.

## **INGRESS PROTECTION TYPE**

Splash-proof, enclosure sealed to IP65

#### **ELECTRICAL CONNECTION**

Plugs directly onto transmitters with 4-20 mA output and right-angle DIN 43650 (3-pin +earth) connector plug.



t. +44(0)1978 262 255 e. sales@esi-tec.com

# www.esi-tec.com