PANEL METER

- **BRIGHT LED DISPLAY**
- **INDICATION RANGE -999 TO +9999**
- **FITS TO DIN 43650 CONNECTOR**
- **PLUG-ON TO ANY TRANSMITTER WITH 4-20MA OUTPUT**
- **EASY TO SCALE ON SITE**
- **ROBUST DESIGN**
- **SET POINT OPTION**

The PM1000 series is a universal 4 digit LED plug-on display for transmitters with 4-20mA 2 wire output and fitted with DIN43650 connector.

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 is required.

Display settings are stored in non-volatile EEPROM, and can be easily modified through the menu using two programming buttons. Calibration 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 90º steps, which will suit any mounting angle and simply installation.

Model PM1000 is the standard version. An integral open-drain 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.

PANEL METER

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 SAMPLING 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
ERROR MESSAGES:
When over-range option is selected:
'HI' is displayed when input is above 20mA 'LO' is displayed when input is less than 4mA
when over-range option is off:
'ErC6' is displayed when range -999 to 9999 is exceeded.
TEMPERATURE RANGE:
Operating: - 10°C to + 60°C
Storage: - 30°C to + 80°C

CASE MATERIAL:
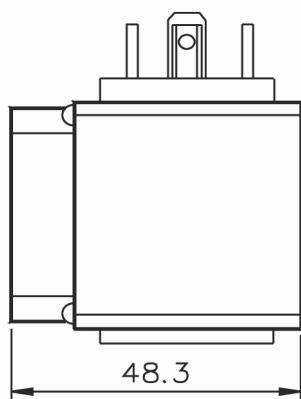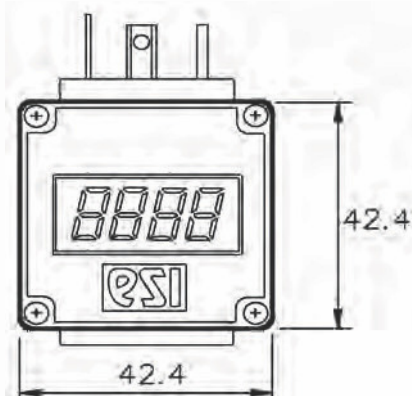Moulded ABS plastic, Red Acrylic display widow, Nitrile seal.
INGRESS PROTECTION TYPE:
Splash-proof, enclosure sealed to IP65
ELECTRICAL CONNECTION:
Plugs directly onto transmitters with 4-20 mA output and right-angle DIN 43650 (3-pin +earth) connector plug.

DIMENSIONS (in mm)

PROGRAMMING

To setup display:
Remove 4 screws and front cover to access programming buttons

ORDER DETAILS
State model number.

Model No.	DESCRIPTION
PM1000	**Standard plug-on display.**
PM1001	**Plug-on display with single set point.**

ELECTRICAL CONNECTIONS

Pin No.	PM1000	PM1001
1	+supply	+supply
2	4-20mA signal	-supply
3	not connected	open drain (P type switch)
—	Connected through to transducer plug	

CALIBRATION

All products manufactured by Ellison Sensors are calibrated using precision calibration equipment with traceability to international standards.

Ellison Sensors operates a policy of continuous product development. We reserve the right to change specification without prior notice.