



PM8005/6

Panel Meter



- AC and DC supply options
- 6 digit LED display
- Direct access menu
- Functions for calibration, alarm setting and more
- Wide range of optional functions



Description

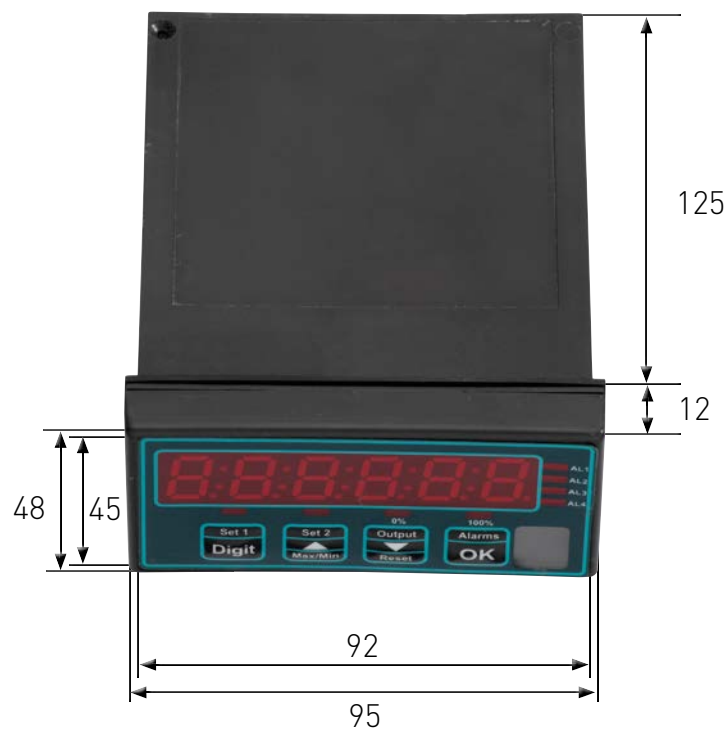
The PM8000 Series digital panel meters are easy to set up and commission, whilst offering extremely high precision and long term reliability.

A MENU-FREE calibration system is employed with this panel meter design. This makes calibration and set-up of operating parameters very straightforward and radically simplifies this process compared with the usual menu arrangement used on most digital meters. The menu in this case is replaced by simple push buttons enabling zero, span, analogue output or alarms to be adjusted via buttons on the front of the panel.

The 6 digit red LED display is standard, providing +/-30,000 count resolution and an accuracy of 0.10% of range. Input signals include 4-20 mA, 0-10 mV, 1-5 V and 0-10 mA. A 24 V sensor excitation supply is provided and can be used to power an external transmitter current loop.

Optional features include; AC or DC excitation, 4-20 mA or 0-10 Vdc analogue output, zero, two or four alarms/relays, various serial data outputs and splash proof cover. Please contact us with your specifications and we will advise you on the suitable model for your application.

Dimensions (in mm)



Technical Data

| Type | PM8005 / PM8006 |
|--|--|
| Display: | High intensity red LED display, 14 mm digit height. |
| Display Update Rate: | 10 readings per second |
| Resolution: | 1 in 400,000 counts maximum over full range, with 6 Digit Display (-199999 to +199999) |
| Input Resistance: | 33 Ω for current input, 1 M Ω for voltage |
| Filtering/ Smoothing: | Selectable time constant of 0 to 5 seconds |
| Accuracy: | \pm 0.05 % of range |
| Temperature Stability: | 25 ppm/ $^{\circ}$ C span, 30 ppm/ $^{\circ}$ C offset |
| Output for External Sensors: | 24 VDC |
| Current Capacity of Excitation Supply: | 60 mA for 24 VDC |
| Power Supply: | Optional 95 to 265 VAC, 11 to 30VDC |
| Current Consumption: | 10VA maximum |
| Temperature Range: | Operating: 0 $^{\circ}$ C to + 50 $^{\circ}$ C (32 $^{\circ}$ F to +122 $^{\circ}$ F); Storage: -20 $^{\circ}$ C to + 70 $^{\circ}$ C (-4 $^{\circ}$ F to +158 $^{\circ}$ F) |
| Electromagnetic Capability: | EMC EN61326-1:1997, Safety EN61010-1:2001; Certification CE marked |
| Electrical Connection: | Detachable screw terminal connector for conductor size 0.5 mm ² to 1.5 mm ² |
| Bezel Size: | 96 mm wide x 48 mm high (1/8 DIN) |
| CutOut Size: | 92 mm wide x 45 mm high |
| Depth behind Panel: | 125 mm minimum required |
| Weight: | 300 grams typically |
| Case Material: | Black polycarbonate. Optional splash proof cover available. |
| Net. Weight (Kg): | 0.4 Kg |

Technical Data

| Model | | Excitation | | Analogue Output | | Alarm | | Serial Output | Power Supply | Analogue Output | Number of Alarms | Serial Output |
|---|---|------------|---|-----------------|---|-------|---|---------------|--------------|-----------------|------------------|---------------|
| Standard 5 Digit Panel Meters Without Features | | | | | | | | | | | | |
| PM8005 | - | AC | | | | | | | 95-265Vac | No | No | No |
| PM8005 | - | VDC | | | | | | | 11-30Vdc | No | No | No |
| Panel Meters With Options - AC Mains Supply | | | | | | | | | | | | |
| PM8006 | - | AC | - | I | | | | | 95-265Vac | 4-20mA | No | No |
| PM8006 | - | AC | - | I | - | AL2 | | | 95-265Vac | 4-20mA | 2 | No |
| PM8006 | - | AC | - | I | - | AL4 | | | 95-265Vac | 4-20mA | 4 | No |
| PM8006 | - | AC | - | I | - | AL2 | - | 232 | 95-265Vac | 4-20mA | 2 | RS232 |
| PM8006 | - | AC | - | I | - | AL4 | - | 232 | 95-265Vac | 4-20mA | 4 | RS232 |
| PM8006 | - | AC | - | I | - | AL2 | - | 485 | 95-265Vac | 4-20mA | 2 | RS485 |
| PM8006 | - | AC | - | I | - | AL4 | - | 485 | 95-265Vac | 4-20mA | 4 | RS485 |
| PM8006 | - | AC | - | V | | | | | 95-265Vac | 0-10Vdc | No | No |
| PM8006 | - | AC | - | V | - | AL2 | | | 95-265Vac | 0-10Vdc | 2 | No |
| PM8006 | - | AC | - | V | - | AL4 | | | 95-265Vac | 0-10Vdc | 4 | No |
| PM8006 | - | AC | - | V | - | AL2 | - | 232 | 95-265Vac | 0-10Vdc | 2 | RS232 |
| PM8006 | - | AC | - | V | - | AL4 | - | 232 | 95-265Vac | 0-10Vdc | 4 | RS232 |
| PM8006 | - | AC | - | V | - | AL2 | - | 485 | 95-265Vac | 0-10Vdc | 2 | RS485 |
| PM8006 | - | AC | - | V | - | AL4 | - | 485 | 95-265Vac | 0-10Vdc | 4 | RS485 |
| PM8006 | - | AC | - | | | AL2 | | | 95-265Vac | No | 2 | No |
| PM8006 | - | AC | - | | | AL4 | | | 95-265Vac | No | 4 | No |
| PM8006 | - | AC | - | | | AL2 | - | 232 | 95-265Vac | No | 2 | RS232 |
| PM8006 | - | AC | - | | | AL4 | - | 232 | 95-265Vac | No | 4 | RS232 |
| PM8006 | - | AC | - | | | AL2 | - | 485 | 95-265Vac | No | 2 | RS485 |
| PM8006 | - | AC | - | | | AL4 | - | 485 | 95-265Vac | No | 4 | RS485 |
| PM8006 | - | AC | - | | | | | 232 | 95-265Vac | No | No | RS232 |
| PM8006 | - | AC | - | | | | | 485 | 95-265Vac | No | No | RS485 |

Order Codes

| Model | | Excitation | | Analogue Output | | Alarm | | Serial Output | Power Supply | Analogue Output | Number of Alarms | Serial Output |
|-------|--|------------|--|-----------------|--|-------|--|---------------|--------------|-----------------|------------------|---------------|
|-------|--|------------|--|-----------------|--|-------|--|---------------|--------------|-----------------|------------------|---------------|

Panel Meters With Options - DC Supply

For all options with 95-265Vac supply please substitute 'AC' with 'VDC'

| | | | | | | | | | | | | |
|--------|---|-----|---|---|---|-----|---|-----|----------|---------|----|-------|
| PM8006 | - | VDC | - | I | | | | | 11-30Vdc | 4-20mA | No | No |
| PM8006 | - | VDC | - | I | - | AL2 | | | 11-30Vdc | 4-20mA | 2 | No |
| PM8006 | - | VDC | - | I | - | AL4 | | | 11-30Vdc | 4-20mA | 4 | No |
| PM8006 | - | VDC | - | I | - | AL2 | - | 232 | 11-30Vdc | 4-20mA | 2 | RS232 |
| PM8006 | - | VDC | - | I | - | AL4 | - | 232 | 11-30Vdc | 4-20mA | 4 | RS232 |
| PM8006 | - | VDC | - | I | - | AL2 | - | 485 | 11-30Vdc | 4-20mA | 2 | RS485 |
| PM8006 | - | VDC | - | I | - | AL4 | - | 485 | 11-30Vdc | 4-20mA | 4 | RS485 |
| PM8006 | - | VDC | - | V | | | | | 11-30Vdc | 0-10Vdc | No | No |
| PM8006 | - | VDC | - | V | - | AL2 | | | 11-30Vdc | 0-10Vdc | 2 | No |
| PM8006 | - | VDC | - | V | - | AL4 | | | 11-30Vdc | 0-10Vdc | 4 | No |
| PM8006 | - | VDC | - | V | - | AL2 | - | 232 | 11-30Vdc | 0-10Vdc | 2 | RS232 |
| PM8006 | - | VDC | - | V | - | AL4 | - | 232 | 11-30Vdc | 0-10Vdc | 4 | RS232 |
| PM8006 | - | VDC | - | V | - | AL2 | - | 485 | 11-30Vdc | 0-10Vdc | 2 | RS485 |
| PM8006 | - | VDC | - | V | - | AL4 | - | 485 | 11-30Vdc | 0-10Vdc | 4 | RS485 |
| PM8006 | - | VDC | - | | | AL2 | | | 11-30Vdc | No | 2 | No |
| PM8006 | - | VDC | - | | | AL4 | | | 11-30Vdc | No | 4 | No |
| PM8006 | - | VDC | - | | | AL2 | - | 232 | 11-30Vdc | No | 2 | RS232 |
| PM8006 | - | VDC | - | | | AL4 | - | 232 | 11-30Vdc | No | 4 | RS232 |
| PM8006 | - | VDC | - | | | AL2 | - | 485 | 11-30Vdc | No | 2 | RS485 |
| PM8006 | - | VDC | - | | | AL4 | - | 485 | 11-30Vdc | No | 4 | RS485 |
| PM8006 | - | VDC | - | | | | - | 232 | 11-30Vdc | No | No | RS232 |
| PM8006 | - | VDC | - | | | | - | 485 | 11-30Vdc | No | No | RS485 |

| Model | | Excitation | | Analogue Output | | Alarm | | Serial Output | Power Supply | Analogue Output | Number of Alarms | Serial Output |
|-------|--|------------|--|-----------------|--|-------|--|---------------|--------------|-----------------|------------------|---------------|
|-------|--|------------|--|-----------------|--|-------|--|---------------|--------------|-----------------|------------------|---------------|

Panel Meters With Features: AC Mains Supply, mV Input

| | | | | | | | | | | | | |
|--------|---|----|---|----|--|--|--|--|-----------|----|----|----|
| PM8006 | - | AC | - | MV | | | | | 95-265Vac | No | No | No |
|--------|---|----|---|----|--|--|--|--|-----------|----|----|----|

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, traceable to national measurement standards.