

Panel Mount Instrument PM5-TR

Rate, Total, Grand Total display.

Measures pulses from flowmeters, proximity switches, encoders etc



4 digit LED 20mm digit height



4 digit LCD 12.7mm digit height



5 digit LED 14.2mm digit height



6 digit LED 14.2mm digit height



6 digit LCD 12.7mm digit height



Circular graph and 5 digit display



20 segment bargraph and 5 digit display

Features

- Rate/Total/Grand Total selectable via pushbuttons
- Pushbutton programming
- Accepts a wide range of input sensor types
- Displays in engineering units
- Versatile rate scaling options
- Electrical isolation between input signal/output/power supply
- Rugged construction
- 240V, 110V, 32V, 24V AC or 12 to 48 V DC supply (factory configured)
- Selectable 5, 12 or 18VDC sensor supply
- Remote switch input allows functions including reset, preset, peak hold, display hold etc.
- Up/down count selectable by an external input
- 2 year guarantee
- Alarm/control relay output (5A) programmable for rate or total or total "pass" mode operation
- Wide range of options available including:
 - Single or dual analog retransmission
 - Additional setpoint relays
 - RS232 or RS485 output
 - 16 bit digital output (PNP or NPN factory configured)
 - Ethernet comms.
 - Isolated sensor supply 24VDC (± 12 VDC)

Combinations of options are available, see page 3 of this brochure for a full list.



Specifications

Technical Specifications

| | |
|--------------------|---|
| Input types: | Selectable to suit most sensor types. For inductive, AC and square wave inputs the maximum input voltage is 48VDC or RMS with appropriate settings |
| Operation: | Rate, total and grand total displays available |
| Impedance: | 1MΩ in normal mode or 12KΩ in attenuated input mode |
| Microprocessor: | MC68HC12 CMOS |
| Ambient temp: | LED models -10°C to 60°C, LCD models -10°C to 50°C |
| Humidity: | 5% to 95% non condensing |
| Display types: | LED models: 4 digit 20mm, 5 digit 14.2mm, status LEDs and 4 way keypad. 6 digit 14.2mm and 4 way keypad 8 digit 10.2mm and 4 way keypad 20 segment LED bar graph, 5 digit display and 4 way keypad 16 segment circular "bargraph", 5 digit display and 4 way keypad LCD models: 4 digit or 6 digit 12.7mm |
| Power supply: | 240, 110, 48, 32, 24VAC 50/60Hz, 12 to 48VDC or 50 to 110VDC (factory configured) |
| Sensor supply: | Selectable 5, 12 or 18VDC (25mA max.) |
| Power usage: | AC supply 4 VA max, DC supply, consult supplier |
| Output (standard): | 1 x relay, form A, rated 5A resistive |
| Relay action: | Programmable N.O. or N.C. or pass mode |

Output Options - see order code section

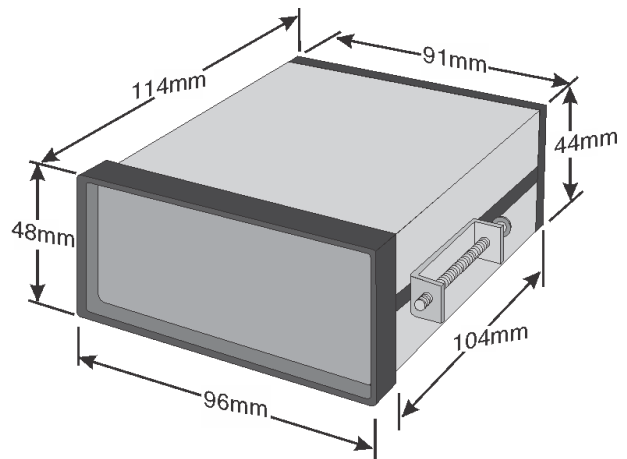
Physical Characteristics

| | |
|----------------|---|
| Bezel size: | DIN 48mm x 96mm x 10mm |
| Case size: | 44mm x 91mm x 115mm behind face of panel |
| Panel cut out: | 45mm x 92mm (+1mm & -0mm) |
| Connections: | Plug in screw terminals (max 2.5mm ² wire) |
| Weight: | 400g basic model, 450g with option card |

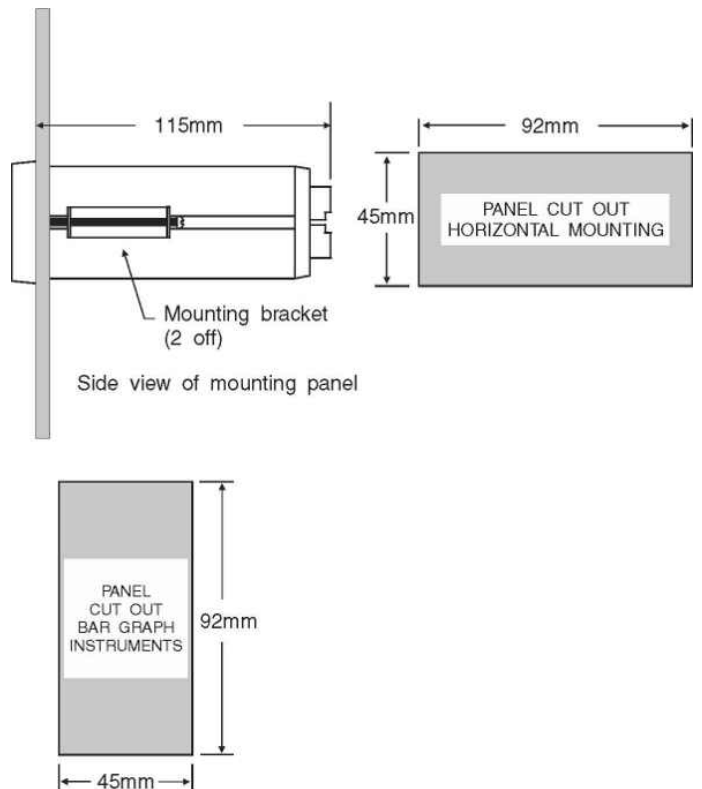
PM5-TR Accessories

| Description | Model No. |
|---------------------------------------|------------------|
| IP67 access cover | COVER-PM-IP67 |
| Wall mount enclosure | ENC-PM1-02 |
| IP65 wall mount encl. with IP67 cover | ENC-PM1-02-IPCOV |
| Surface mount kit | PM4-OPT-SMKIT |
| Portable/bench enclosure AC | ENC-PM-AC |
| Portable/bench enclosure DC | ENC-PM-DC |

PM5-TR case dimensions



PM5-TR panel mounting details



Order codes e.g. PM5-TR-240-5E

The last section is for optional outputs, if required. (Note: only one of the optional outputs below can be fitted).

PM5-TR- - -

| | | | | |
|-----|-------|-------|-------|----------------------|
| | ↑ | ↑ | ↑ | Power supply |
| 240 | ----- | ----- | ----- | 240VAC |
| 110 | ----- | ----- | ----- | 110VAC |
| 48A | ----- | ----- | ----- | 48VAC |
| 32A | ----- | ----- | ----- | 32VAC |
| 24A | ----- | ----- | ----- | 24VAC |
| DC | ----- | ----- | ----- | 12 to 48VDC isolated |

| | | |
|-----|-------|--|
| | ↑ | Display type |
| 4E | ----- | 4 digit 20mm red LED |
| 4C | ----- | 4 digit 12.7mm LCD |
| 5E | ----- | 5 digit 14mm red LED with front keypad and alarm annunciators |
| 5BP | ----- | 5 digit 7.6mm red LED + 20 segment bargraph and alarm annunciators |
| 6E | ----- | 6 digit 14mm red LED with front keypad |
| 6C | ----- | 6 digit 12.7mm LCD |

| | | |
|-------|------|---|
| | ↑ | Optional outputs |
| R | ---- | One extra relay (form C, 5A @ 240VAC) |
| RR | ---- | Two extra relays (form C, 5A @ 240VAC) |
| RRR | ---- | Three extra relays (form C, 5A @ 240VAC) |
| R6 | ---- | Six extra relays (form A 2A @ 240VAC) |
| R12 | ---- | One extra relay (form A, 3A @ 240VAC) plus +/- 12V (24V) supply (20mA max.) |
| I | ---- | Isolated 4-20mA retransmission 12 bit |
| A | ---- | Isolated 4-20mA or DCV retransmission 16 bit |
| IR | ---- | Isolated 4-20mA retransmission 12 bit + extra relay (form A, 3A @ 240VAC) |
| AR | ---- | Isolated 4-20mA or DCV retransmission 16 bit + extra relay (form A, 3A @ 240VAC) |
| *IRRR | ---- | Isolated 4-20mA retransmission 12 bit + 3 extra relays (form A, 2A @ 240VAC) |
| ARRR | ---- | Isolated 4-20mA or DCV retransmission 16 bit + 3 extra relays (form A, 2A @ 240VAC) |
| *IR6 | ---- | Isolated 4-20mA retransmission 12 bit + 6 extra relays (form A, 2A @ 240VAC) |
| AR6 | ---- | Isolated 4-20mA or DCV retransmission 16 bit + 6 extra relays (form A, 2A @ 240VAC) |
| II | ---- | Dual isolated 4-20mA retransmission 12 bit |
| AA | ---- | Dual isolated 4-20mA or DCV retransmission 16 bit |
| IIR | ---- | Dual isolated 4-20mA retransmission 12 bit + extra relay (form A, 3A @ 240VAC) |
| AAR | ---- | Dual isolated 4-20mA or DCV retransmission 16 bit + extra relay (form A, 3A @ 240VAC) |
| 12 | ---- | +/- 12V (24V) or +/- 5V (10V) supply (20mA max.) |
| 12I | ---- | +/- 12V (24V) or +/- 5V (10V) supply (20mA max.) + isolated 4-20mA retransmission 12 bit |
| 12A | ---- | +/- 12V (24V) or +/- 5V (10V) supply (20mA max.) + isolated 4-20mA or DCV retransmission 16 bit |
| 12IR | ---- | +/- 12V (24V) or +/- 5V (10V) supply (20mA max.) + isolated 4-20mA retransmission 12 bit + extra relay (form A, 3A @ 240VAC) |
| 12AR | ---- | +/- 12V (24V) or +/- 5V (10V) supply (20mA max.) + isolated 4-20mA or DCV retransmission 16 bit + extra relay (form A, 3A @ 240VAC) |
| DP | ---- | 16 bit PNP digital output with 5/24V excitation |
| DPR | ---- | 16 bit PNP digital output with 5/24V excitation plus extra relay (form A, 3A @ 240VAC) |
| DN | ---- | 16 bit NPN digital output with 5/24V excitation |
| DNR | ---- | 16 bit NPN digital output with 5/24V excitation plus extra relay (form A, 3A @ 240VAC) |
| 2 | ---- | RS232 comms. |
| 2R | ---- | RS232 comms. + 1 extra relay (form A, 3A @ 240VAC) |
| 2RRR | ---- | RS232 comms. + 3 extra relays (form A, 2A @ 240VAC) |
| 2R5 | ---- | RS232 comms. + 5 extra relays (form A, 2A @ 240VAC) |
| *2I | ---- | RS232 comms. + isolated 4-20mA retransmission 12 bit |
| 2A | ---- | RS232 comms. + isolated 4-20mA or DCV retransmission 16 bit |
| *2IR | ---- | RS232 comms. + isolated 4-20mA retransmission 12 bit + extra relay (form A, 2A @ 240VAC) |
| 2AR | ---- | RS232 comms. + isolated 4-20mA or DCV retransmission 16 bit + extra relay (form A, 2A @ 240VAC) |
| 4 | ---- | RS485 comms. |
| 4R | ---- | RS485 comms. + 1 extra relay (form A, 3A @ 240VAC) |
| 4RRR | ---- | RS485 comms. + 3 extra relays (form A, 2A @ 240VAC) |
| 4R5 | ---- | RS485 comms. + 5 extra relays (form A, 2A @ 240VAC) |
| *4I | ---- | RS485 comms. + isolated 4-20mA retransmission 12 bit |
| 4A | ---- | RS485 comms. + isolated 4-20mA or DCV retransmission 16 bit |
| *4IR | ---- | RS485 comms. + isolated 4-20mA retransmission 12 bit + extra relay (form A, 3A @ 240VAC) |
| 4AR | ---- | RS485 comms. + isolated 4-20mA or DCV retransmission 16 bit + extra relay (form A, 3A @ 240VAC) |
| ET | ---- | Ethernet comms. + RS232 or RS485 (Power over Ethernet available with PM5 DC supply models) |
| ETR | ---- | Ethernet comms. + RS232 or RS485 + 1 extra relay (form A, 3A @ 240VAC) |
| ETDL | ---- | Ethernet comms. + RS232 or RS485 + 8Mbyte data logger (Power over Ethernet available with PM5 DC supply models) |
| ETDLR | ---- | Ethernet comms. + RS232 or RS485 + 8Mbyte data logger + 1 extra relay (form A, 3A @ 240VAC) (Power over Ethernet available with PM5 DC supply models) |

* means not a normal stock item - check availability, minimum order quantity may apply