

Intelligent PM4 monitors

Model PM4-RT8

4 inputs of 3-wire RTD or 8 inputs of 2-wire RTD



Description

The PM4-RT8 accepts 4 channels of 3-wire RTD temperature sensors or 8 channels of 2-wire RTD temperature sensors.

The instrument can function as an accurate monitor, alarm, controller, signal conditioner or transmitter.

The instruments feature flexible pushbutton calibration and programming.

The display may be programmed to show temperature units $^{\circ}\text{C}$ or $^{\circ}\text{F}$ e.g. 522°C .

Each instrument is supplied with a single relay output as standard. Optional outputs include additional relays, isolated outputs, analog (4-20mA, 0-1V, 0-10V, single or dual channel outputs), digital (BCD or binary) or serial communications (RS232 or RS485).

An external input is configurable to perform one of various functions e.g. peak hold, peak and valley memory, two level brightness switching, scale switching, setpoint only access or security lock out.

Electrical isolation between power supply, input signals and retransmission eliminates grounding and common mode voltage problems. Note - the inputs have a common ground. This isolation feature makes the PM4 ideal for interfacing to PLCs, computers and other data acquisition equipment.

Features

- Accepts 4 channels of 3-wire RTD sensors or 8 channels of 2-wire RTD sensors
- Pushbutton calibration and setup
- Displays in $^{\circ}\text{C}$, $^{\circ}\text{F}$ or absolute
- Display modes include: Scanning all channels, display of highest input, display of lowest input, display of average of all inputs or display, display of maximum difference between channels
- Electrical isolation between input signal/output/power supply
- 240V, 110V, 32V, 24VAC, 12 to 48VDC or 50 to 110VDC operation (factory configured)
- Programmable digital filter
- Alarm/control relay output (5A)
- 2 year guarantee
- Wide range of options available:
 - Single or dual analog retransmission
 - Up to 3 additional relays - a total of 4
 - RS232 or RS485 serial communications
 - Binary or BCD retransmission
- Remote input for special functions including
 - peak/display hold
 - high/lo memory
 - display brightness control
 - switch display scaling

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Specifications

Technical Specifications

Input types:	Up to 4 x 3-wire Pt100 or Pt1000 RTD or up to 8 x 2-wire Pt100 or Pt1000 RTD
Display resolution:	1° or 0.1°selectable
Display units:	°C, °F or Absolute (°K)
ADC resolution:	1 in 20,000
Accuracy:	0.1% of FS when calibrated (±1 digit)
Sample rate:	3-wire - 1 channel sampled per second 2-wire - 1 channel sampled per half second
ADC conversion:	Dual slope ADC
Microprocessor:	MC68HC11 CMOS
Ambient temp:	-10°C to 60°C
Humidity:	5% to 95% non condensing
Display types:	5 digit 14.2mm, status LEDs + keypad. 6 digit 14.2mm and 4 way keypad 20 segment LED bar graph, 5 digit display and 4 way keypad
Power supply:	240, 110, 32, 24VAC 50/60Hz, 12 to 48VDC or 50 to 110VDC (factory configured)
Power usage:	AC supply 4 VA max, DC supply, consult supplier
Output (standard):	1 x relay, form A, rated 5A resistive
Transmitter supply:	18VDC (25mA maximum)
Relay action:	Programmable N.O. or N.C.
Output Options - see order code for full list	
Extra relays:	1 or 3 extra relays available
Retransmission:	Analog 4 to 20mA, 0 to 1V or 0 to 10V link selectable (single or dual channel versions) Serial RS232 or RS485, choice of ASCII or Modbus RTU protocols Digital Binary or BCD
DC voltage out:	Isolated 24V (±12V) standard ±5V (10V) link selectable (rated at 20mA)

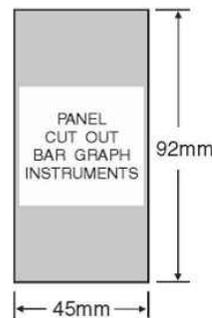
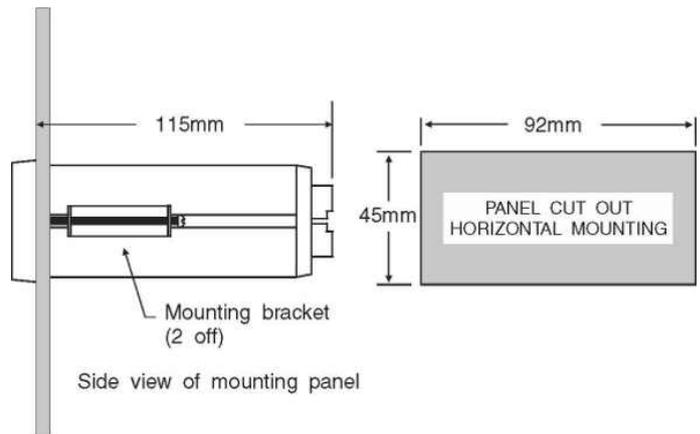
Physical Characteristics

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 options

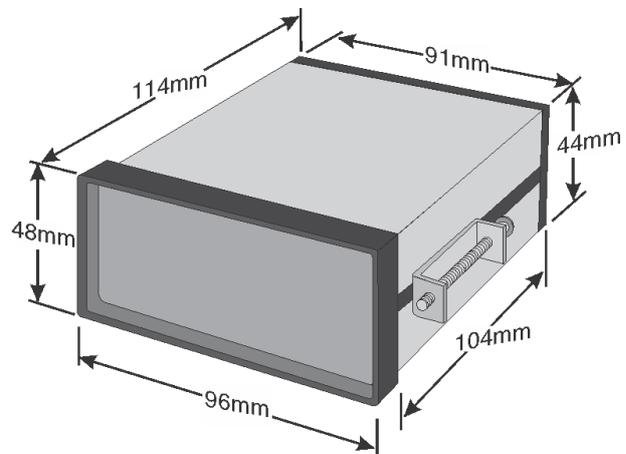
PM4-RT8 Accessories

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

PM4-RT8 panel mounting details



PM4-RT8 case dimensions



Wiring diagrams and full operations manual are available from www.aicpl.com.au/pdf/pm4rt8man.pdf.

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