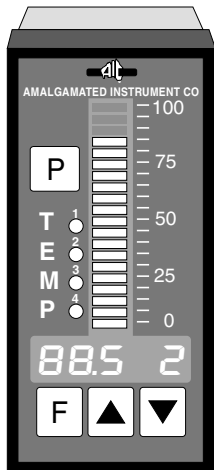
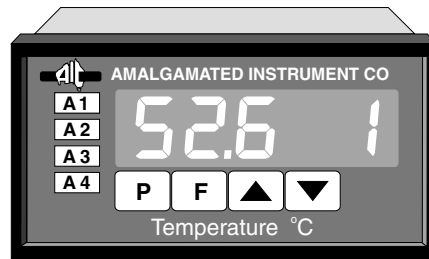


PM4-RT8 - multi channel monitor

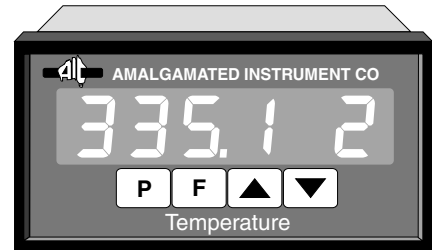
4 inputs of 3-wire RTD or 8 inputs of 2-wire RTD temperature sensors



20 segment bargraph + 5 digit 7.6mm display
with keypads and alarm LEDs



14.2mm LED 5 digit plus keypad
and alarm LEDs



14.2mm LED 6 digit plus keypad

Description

Model 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 and is designed to meet a wide variation in user requirements. 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. **52.2 $^{\circ}\text{C}$** .

The programmable digital filter improves stability by smoothing out short term interference. 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

- 4 channels of 3-wire RTD temperature sensors or 8 channels of 2-wire RTD temperature sensors
- Pushbutton calibration and setup
- Displays temperature in $^{\circ}\text{C}$ or $^{\circ}\text{F}$ or absolute
- Isolation between signal/output/power supply
- 240V, 110V, 32V, 24V AC, 12 to 48V DC or 50 to 110V DC operation (factory configured)
- Programmable digital filter
- Relay output (5A at 240VAC)
- Rugged construction
- 2 year guarantee

Options

- Up to three additional relay outputs (5A) - a total of 4
- Optically isolated analog output, single or dual outputs 4-20mA, 0-1V or 0-10V
- Binary or BCD retransmission
- RS232 or RS485 serial communications



SPECIFICATIONS

Specifications are subject to change without notice

TECHNICAL SPECIFICATIONS

Input Types: 4 inputs - 3-wire RTD, or
8 inputs - 2-wire RTD temperature sensors

Measuring range: Pt100 (100Ω RTD) -180°C to 650°C
Pt1000 (1000Ω RTD) -180°C to 550°C

ADC resolution: 1 in 20,000

Accuracy: 0.1% when calibrated

Sample rate: 3-wire RTD - 1 sample per second
2-wire RTD - 2 samples per second

ADC conversion: Dual slope ADC

Microprocessor: MC68H11 CMOS

Ambient temp: LED models -10°C to 60°C

Humidity: 5 to 95% non condensing

Display types: **LED models:**
5 digit 14.2mm plus status LEDs and 4 way keypad.
6 digit 14.2mm plus 4 way keypad
20 segment bargraph with 5 digit display, keypads & alarm LEDs

Power supply: AC 240V, 110V, 32V, 24V AC.
12 to 48V DC or 50 to 110V DC (factory configured)

Power usage: AC supply 4VA max,
DC supply, typically 4W max

Output (standard): 1 x relay, form, A rated 5A resistive

Relay action: Programmable N.O. or N.C.

OUTPUT OPTIONS

Extra relays: 1 or 3 extra relays may be fitted. Same specifications as relay 1 (form C available with some options)

Retransmission: **Analog** 4 to 20mA, 0 to 1V or 0 to 10V link selectable. Single or dual channel analog output options
Digital BCD/Binary
Serial RS232 or RS485 (ASCII)

PHYSICAL CHARACTERISTICS

Bezel size: DIN 48mm x 96mm x 10mm

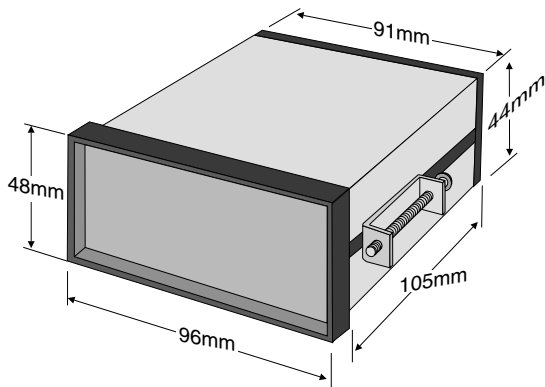
Case size: 44mm x 91mm x 120mm behind face of panel

Panel cut out: 45mm x 92mm +1mm & -0mm

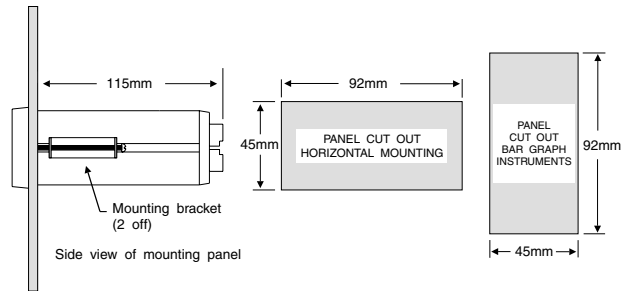
Connections: Plug in screw terminals (max 2.5mm² wire for supply & relay, 1.5mm² for signal & remote input)

Weight: 400 gms basic model, 450 gms with option card

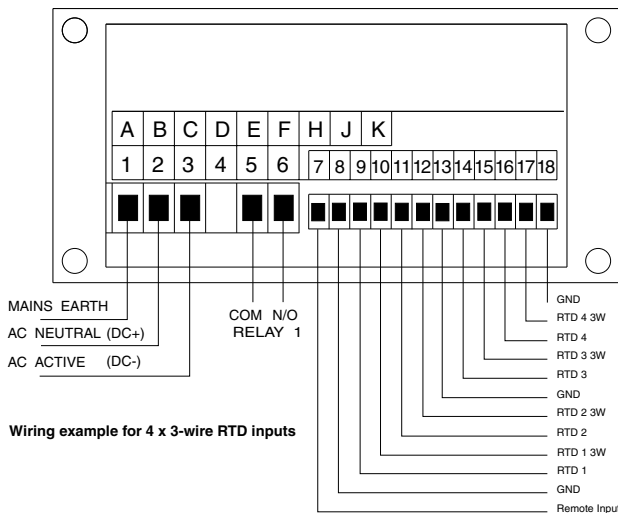
INSTRUMENT DIMENSIONS



PANEL MOUNT INSTALLATION



ELECTRICAL CONNECTIONS



ORDER CODE

PM4-RT8- - -

POWER SUPPLY

PM4-RT8- - -

240 VAC

110 VAC

32 VAC

24 VAC

12 to 48 VDC

50 to 100 VDC

DISPLAY TYPE

PM4-RT8- - -

5 DIGIT LED + KEYPAD & ALARM LEDs

6 DIGIT LED + KEYPAD

BARGRAPH + 5 DIGIT DISPLAY + KEYPAD

RETRANSMISSION OUTPUT

PM4-RT8- - -

ANALOG (4-20mA, 0-1V, 0-10V selectable)

DUAL ANALOG (4-20mA, 0-1V, 0-10V selectable)

BCD/Binary NPN

BCD/Binary PNP

RS232 Serial Communications

RS485 Serial Communications

EXTRA RELAY OUTPUTS

PM4-RT8- - -

1 EXTRA RELAY

3 EXTRA RELAYS