

# Intelligent PM4 Monitors

## PM4-RTC

Real Time Clock



4 digit LED 20mm digit height



4 digit LCD 12.7mm digit height



4 digit LED 14.2mm digit height



6 digit LED 14.2mm digit height



6 digit LCD 12.7mm digit height

### Description

The real time clock monitor, PM4-RTC, is a highly visible and versatile indicator with a selection of display options. The clock may be set to display in 24 or 12 hour format. User selectable display formats are:

- Hours.Mins e.g. **1222**
- Hours.Mins.Secs - 6 digit model e.g. **0858.30**
- Days e.g. **364**
- Day.Month e.g. **08.11**
- Day.Month.Year - 6 digit models e.g. **28.11.12**
- Month.Day e.g. **1107**
- Month.Day.Year - 6 digit models e.g. **1128.12**

Clock synchronisation may be via an internal clock chip, 50Hz or 60Hz mains synchronisation, optional high accuracy 10MHz crystal or optional GPS satellite transmission.

The clock circuitry is backed up by battery which means that, in the case of power failure, the time does not need to be reset when power is re-applied to the display.

Each instrument is supplied with one control/alarm relay (standard). Extra relays and other outputs are available as options. The versatile alarm functions allow up to 32 day/time setpoints to be programmed e.g. a relay can be set to operate on Monday to Friday only at 08.30 and 16.30.

With serial retransmission options fitted, the PM4-RTC can be used as a master station in a master/slave clock installation. RS232 retransmission allows for connection of one slave display. RS485 retransmission allows for the connection of up to 32 slave displays to a single master.

### Features

- Battery backed clock circuit
- Pushbutton calibration and setup
- Choice of display modes
- 240V, 110V, 32V, 24VAC, 12 to 48VDC or 50 to 110VDC operation (factory configured)
- Alarm/control relay output (5A) with up to 32 day/time setpoints
- Remote input for special functions including
  - Setpoint Access
  - No Access
  - Display brightness control

### Output Options

- Additional setpoint relays (1, 3 or 6)
- RS232 or RS485 serial communications

PM4RTC-3.2-0

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## Specifications - subject to change without notice

### Technical Specifications

Synchronisation:	Internal clock oscillator, 50Hz mains frequency, 60Hz mains frequency, high accuracy 10MHz crystal or optional GPS receiver
Accuracy:	Internal Oscillator: ±30 seconds/month Mains synch: Accurate to mains frequency. Where mains frequency is controlled this gives a typical accuracy of ±1 seconds High accuracy crystal: ±3 seconds/month GPS synch: Accurate to GPS system ±0.1 second
Memory Retention:	Battery backed clock oscillator operates in case of power failure
Microprocessor:	MC68HC11 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:	<b>LED models:</b> 4 digit 20mm, 5 digit 14.2mm, status LEDs, keypad. 6 digit 14.2mm, keypad. <b>LCD models:</b> 4 digit or 6 digit 12.7mm
Power supply:	240, 110, 32, 24VAC 50/60Hz, or 12 to 48VDC (factory configured)
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.
<b>Output Options</b>	
Extra relays:	1, 3 or 6 extra relays available
Retransmission:	Serial RS232 or RS485, choice of ASCII or Modbus RTU protocols
<b>Physical Characteristics</b>	
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 <sup>2</sup> wire)
Weight:	400g basic model, 450g with option card

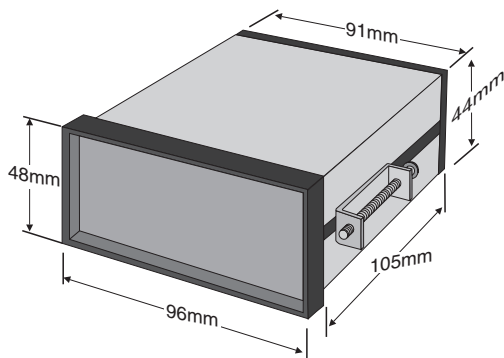
## PM4-RTC Order Codes

<b>PM4-RTC</b> - [ ] - [ ] - [ ]	
<b>Power Supplies</b>	
<b>PM4-RTC</b> - [XXX] - [ ] - [ ]	
240VAC .....	240
110VAC .....	110
32VAC .....	32
24VAC .....	24
12 to 48VDC .....	DC
<b>Display Types</b>	
<b>PM4-RTC</b> - [ ] - [XXX] - [ ]	
4 DIGIT LED .....	4E
5 DIGIT LED + KEYPAD & ALARM LEDs .....	5E
6 DIGIT LED + KEYPAD .....	6E
8 DIGIT + KEYPAD .....	8E
4 DIGIT LCD .....	4C
6 DIGIT LCD .....	6C
<b>Output Options</b> <b>PM4-RTC</b> - [ ] - [ ] - [XXX]	
RS232 .....	2
RS485 .....	4
1 EXTRA RELAY .....	R
3 EXTRA RELAYS .....	RRR
6 EXTRA RELAYS .....	R6

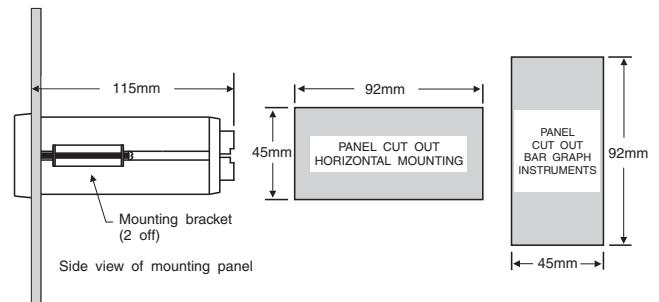
## PM4-RTC Accessories

Description	Model No.
IP65 access cover	COVER-IP65
Wall mount enclosure	ENC-PM1-01
Wall mount encl. with IP65 cover	ENC-IP65-PM1-01
Surface mount kit	PM4-OPT-SMKIT
Portable/bench enclosure AC	ENC-PM-AC
Portable/bench enclosure DC	ENC-PM-DC

### PM4-RTC case dimensions



### PM4-RTC panel mounting details



Wiring diagrams and full operations manual are available from [www.aicpl.com.au/pdf/pm4rtcma.pdf](http://www.aicpl.com.au/pdf/pm4rtcma.pdf).