

Intelligent PM4 monitors

Model PM4-RSA

Arithmetic operations from RS485 inputs



4 digit LED 20mm digit height



4 digit LCD 12.7mm digit height



5 digit LED 14.2mm digit height



Circular graph and 5 digit display



20 segment bargraph and 5 digit display



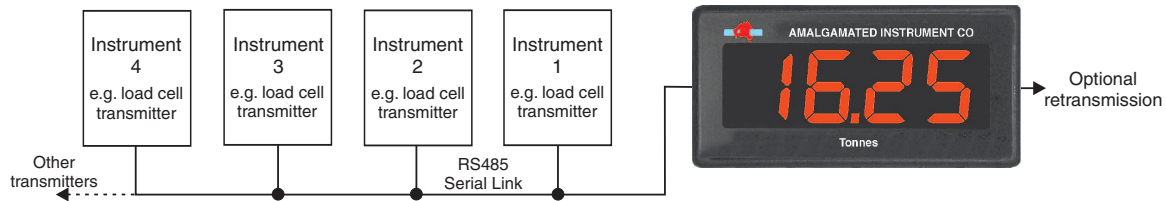
6 digit LED 14.2mm digit height



8 digit LED 10mm digit height



6 digit LCD 12.7mm digit height



Description

Model PM4-RSA is a RS485 input display with arithmetic capability.

Multiple sources can be polled and their inputs combined arithmetically. Each source can be individually scaled and then combined arithmetically with other sources. Arithmetic operations between sources include add, subtract, multiply, divide, highest, lowest, sine and cosine.

The PM4-RSA is ideal for applications requiring multi-input calculations such as load cell combining (or subtraction or averaging etc.), power measurement, density correction, flow combining, temperature correction, ratios etc.

For example, in the block diagram above, the PM4-RSA could be programmed to accurately combine load cells. The display shows the total of load cell 1 + load cell 2 + load cell 3 + load cell 4. Baud rate, parity, data bits, arithmetic operations and other parameters are easily set up by the user using "on display" easy to follow messages.

Isolated retransmission options allow the instruments to retransmit as either a serial (RS232 or RS485 with choice of ASCII or Modbus RTU protocols), analog (4-20mA, 0-1V or 0-10VDC) signal or binary/BCD signals.

Features

- Addresses multiple sources via RS485
- Versatile arithmetic formula
- Pushbutton programming
- Alarm relay output
- Serial data reduces the risk of electrical noise causing corruption of the signal
- 240V, 110V, 32V, 24V AC, 12 to 48 V DC or 50 to 110 V DC operation (factory configured)
- Rugged construction
- 2 year guarantee
- Wide range of options available:
 - Single or dual analog retransmission
 - Additional setpoint relays
 - RS232 or RS485 serial communications
 - Isolated transmitter supply 24VDC (± 12 VDC)

PM4RSA-3.4-0

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Specifications

Technical Specifications

Input types: RS485 ASCII serial data
 Baud rate: Programmable 300, 600, 1200, 2400, 4800, 9600, 19.2k or 38.4k
 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: **LED models:**
 4 digit 20mm,
 5 digit 14.2mm, status LEDs, keypad.
 6 digit 14.2mm, keypad
 8 digit 10.2mm, 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, 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
 Relay action: Programmable N.O. or N.C.

Output Options

Extra relays: 1, 3 or 6 extra relays available
 Retransmission: Analog (4-20mA, 0-1VDC or 0-10VDC) (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), 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
 Weight: 400g basic model, 450g with option card

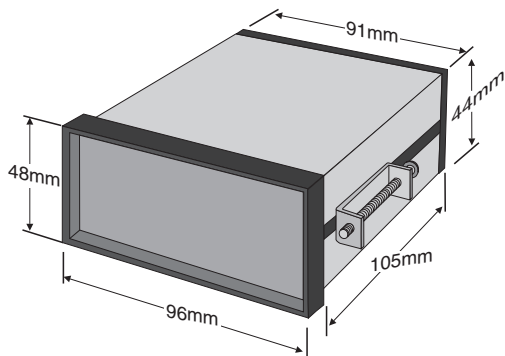
PM4-RSA Order Codes

PM4-RSA - [] - [] - []	
Power Supplies	
PM4-RSA - [XXX] - [] - []	
240VAC	240
110VAC	110
32VAC	32
24VAC	24
12 to 48VDC	DC
50 to 110VDC	DCH
Display Type	
PM4-RSA - [] - [XXX] - []	
4 DIGIT LED	4E
5 DIGIT LED + KEYPAD & ALARM LEDs	5E
6 DIGIT LED + KEYPAD	6E
8 DIGIT + KEYPAD	8E
BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	5BP
CIRCULAR BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	5GP
4 DIGIT LCD	4C
6 DIGIT LCD	6C
Options	
PM4-RSA - [] - [] - [XXX]	
ANALOG (4-20mA, 0-1V or 0-10V selectable)	A
DUAL ANALOG (4-20mA, 0-1V or 0-10V selectable)	AA
RS232	2
RS485	4
BCD/Binary NPN	DN
BCD/Binary PNP	DP
DC VOLTAGE OUTPUT 24V (±12V)	12
1 EXTRA RELAY	R
3 EXTRA RELAYS	RRR
6 EXTRA RELAYS	R6
ANALOG + 1 EXTRA RELAYS	AR
ANALOG + 3 EXTRA RELAYS	ARRR
ANALOG + 6 EXTRA RELAYS	ARR6

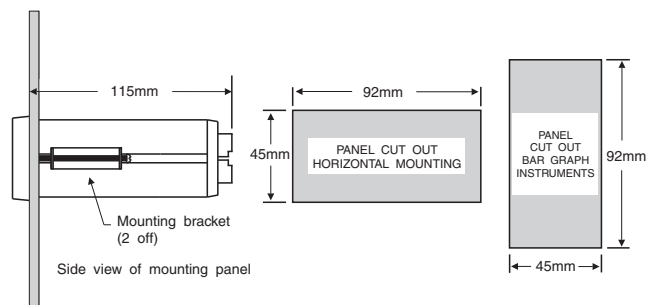
PM4-RSA Accessories

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-RSA case dimensions



PM4-RSA panel mounting details



Wiring diagrams and full operations manual are available from www.aicpl.com.au/pdf/pm4rsman.pdf.