

# Intelligent PM4 monitors

## Model PM4-SG



Measures weight, force torque, pressure, level from 4 wire mV/V input



4 digit LED 20mm digit height



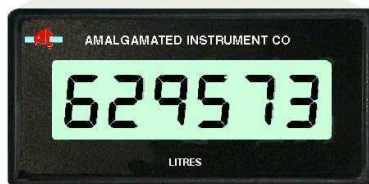
4 digit LCD 12.7mm digit height



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

- Accepts 4 wire mV/V output load cells/strain bridges or pressure sensors
- Accuracy up to 0.01% of full scale
- 10 samples/second sample rate
- 5VDC or 10VDC excitation voltage
- Standard alarm relay, 5A at 240VAC (resistive load)
- Selectable input range in steps 0.5mV/V to 100mV/V
- Flexible calibration methods
- Configurable visual display warning for over/under values
- Pushbutton calibration and setup
- Ratiometric measurement improves accuracy and stability
- Wide range of display options available
- Display reads in engineering units
- Electrical isolation between input signal/output/power supply
- 240V, 110V, 32V, 24VAC, 12 to 48VDC or 50 to 110VDC operation (factory configured)
- Wide range of output options available including:
  - Analog retransmission
  - Additional setpoint relays
- Remote input for special functions including:
  - display hold
  - peak hold
  - max/min memory
  - tare or zero
  - display brightness control
- On models fitted with front panel pushbuttons the **P** button may also be programmed to perform the tare, zero, or peak/valley memory special functions

PM4-SG -4.4-0

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## Specifications - subject to change without notice

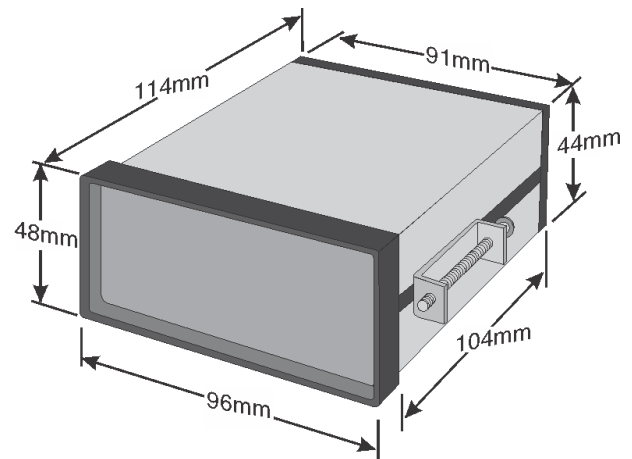
### Technical Specifications

Input types:	Ratiometric 4-arm strain bridge
Input sensitivity:	0.5mV/V to 100mV/V selectable
Excitation voltage:	5V or 10V link selectable (see note below)
Bridge resistance:	80Ω to >2000Ω . If bridge resistance is less than 350Ω (nominal) use 5V excitation
ADC conversion:	Up to 20 bit Sigma Delta conversion
Accuracy:	0.01% of full scale (alarms & display) dependant on mV/V range
Sample rate:	10 samples per second
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. 20 segment LED bargraph, 5 digit display + 4 way keypad 16 segment circular "bargraph", 5 digit display + 4 way keypad <b>LCD models:</b> 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: LED displays 35mA at 24VDC, LCD displays 20mA at 24VDC Plus sensor current Figures are for instruments with no options fitted.
Output (standard):	1 x relay, form A, rated 5A at 240VAC resistive
Relay action:	Programmable N.O. or N.C.
<b>Output Options - see order code for full list</b>	
Extra relays:	1 or 3 extra relays available
Retransmission:	Analog 4 to 20mA, 0 to 1V or 0 to 10V (link selectable)
DC voltage out:	Isolated 24V (±12V), 25mA
<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

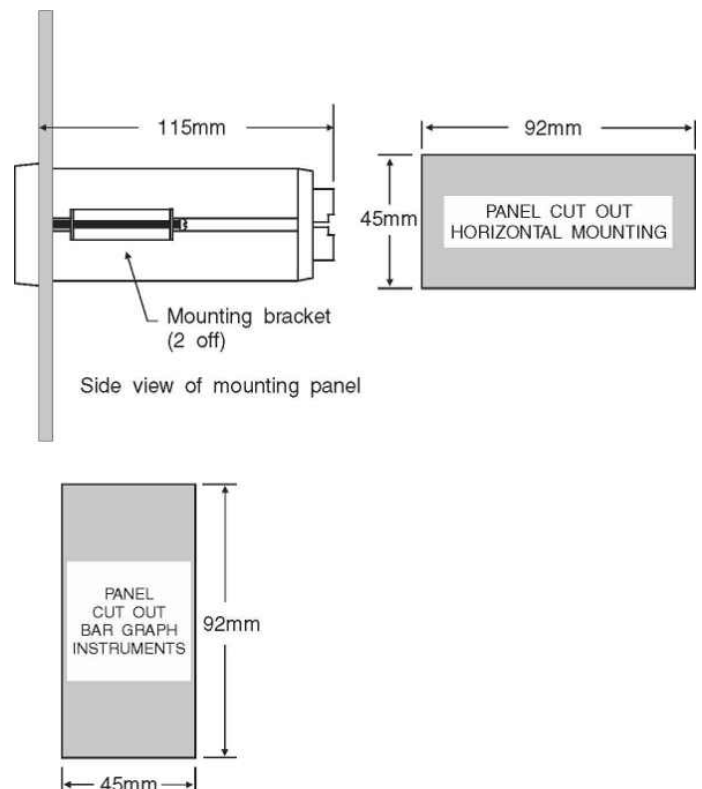
### PM4-SG Accessories

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

### Case dimensions



### Panel mounting details



Wiring diagrams and full operations manual are available from [www.aicpl.com.au/pdf/pm4sgman.pdf](http://www.aicpl.com.au/pdf/pm4sgman.pdf).

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## PM4-SG order codes

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

PM4-SG-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
	↑		↑		↑
	<b>Power supply</b>				
240	-----		-----		240VAC
110	-----		-----		110VAC
32	-----		-----		32VAC
24	-----		-----		24VAC
DC	-----		-----		12-48VDC isolated
DCH	-----		-----		50-110VDC isolated
	<b>Display type</b>				
4E	-----		-----		4 Digit 20mm red led
5E	-----		-----		5 digit 14mm red led with front pushbuttons & annunciators
6E	-----		-----		6 digit 14mm red led with front pushbuttons
5BP	-----		-----		Bargraph with 7.6mm red led and front pushbuttons
5GP	-----		-----		Circular bargraph with 7.6mm red led and front pushbuttons
4C	-----		-----		4 digit 12.7mm lcd
4CG	-----		-----		4 digit 12.7mm lcd with backlight
6C	-----		-----		6 digit 12.7mm lcd
	<b>Optional outputs</b>				
R	-----		-----		2nd setpoint relay
R12	-----		-----		2nd setpoint relay and 24V (+/- 12V) isolated transmitter supply
RRR	-----		-----		2nd, 3rd and 4th setpoint relays
12	-----		-----		24V (+/- 12V) isolated transmitter supply
A	-----		-----		Analog retransmission (isolated)
AR	-----		-----		Analog retransmission (isolated) and 2nd setpoint relay
ARRR	-----		-----		Analog retransmission (isolated) and 2nd, 3rd and 4th setpoint relays
AR12	-----		-----		Analog retransmission (isolated), 2nd relay and 24V (+/- 12V) isolated transmitter supply
A12	-----		-----		Analog retransmission (isolated) and 24V (+/- 12V) isolated transmitter supply

## Other applications available with panel mount displays

- Analog input, process transmitters etc. 4-20mA, 0-1VDC, 0-10VDC, slidewire
- Rate, total, count, grand total from pulse input
- Rate, total from quadrature pulse input
- Liquid conductivity/resistivity/ppm
- pH/Redox (ORP)
- Loop powered displays
- AC current or AC voltage input
- Temperature - RTD, thermocouple, 4-20mA
- Auto / Manual station
- Weighing/pressure measurement - mV/V ratiometric sensors and loadcells
- Liquid level measurement - mV/V ratiometric or analog transducers
- Serial input - RS232, RS485, Current loop
- Synchronous Serial Interface (SSI)
- Binary, BCD or Gray Code input
- Real Time clock with alarms
- Timer - elapsed time, stopwatch, etc.

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