

Panel Mount Indicators

PM4-AM Auto/Manual Loading Station



PM4 displays



Description

The PM4-AM Auto/Manual Loading Station is a versatile instrument which may be configured to accept inputs of 4-20mA, DC volts ($\pm 100\text{mVDC}$, $\pm 1\text{VDC}$, $\pm 10\text{VDC}$ or $\pm 100\text{VDC}$) or slidewire, then retransmit an automatically or manually controlled analog output of 4-20mA, 0-1V or 0-10V.

The instrument may be calibrated to display the input directly in engineering units.

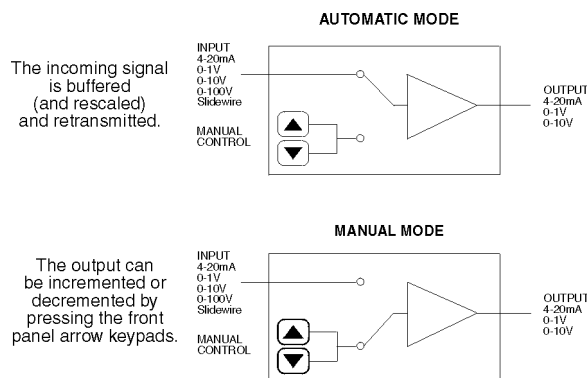
The PM4-AM can be changed between auto and manual by a remote contact closure input or the **P** button. The PM4-AM provides a bumpless auto to manual transfer and a smooth transition between manual to auto (the ramp rate is programmable).

The internal relay provides the external controller with an AUTO/MAN status signal (using A3 and A4 indicators). The PM4-AM is available with a wide range of power supplies (factory configured) and an optional extra relay and transmitter power output.

Electrical isolation between power supply, signal input and retransmission, eliminates grounding and common mode voltage problems.

Features

- Provides manual control and buffered auto transfer
- Wide range of input/output mA/Volts
- Current or voltage input and output combinations
- Bumpless auto to manual transfer
- Programmable manual to auto smooth ramping
- Programmable digital filter
- Pushbutton manual control calibration and setup
- Electrical isolation between input signal/output/ power supply
- Displays in engineering units
- Independent scaling for bargraph and seven segment display on bargraph versions
- 240V, 110V, 32V, 24V AC, 12 to 48V DC or 50 to 110V DC power supply (factory configured)
- Auto/manual status relay output
- Local or remote auto/manual change over
- 2 year guarantee



PM4AM-3.5-0

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Specifications

Technical Specifications

Input types:	Link selectable $\pm 20\text{mA}$, 4 to 20mA or $\pm 100\text{mV}$, $\pm 1\text{V}$, $\pm 10\text{V}$, $\pm 100\text{V}$ or 0-1k Ω to 0-1M Ω 3 wire slidewire
Impedance:	80 Ω nominal (4 to 20mA) 1M Ω on DC voltage
ADC resolution:	1 in 20,000
Accuracy:	0.1% of FS when calibrated (0.3% on $\pm 100\text{mV}$ and $\pm 2\text{mA}$ ranges)
Sample rate:	4 per sec
ADC conversion:	Dual slope ADC
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. LED bar graph 20 segment bar, 5 digit display, 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 Analog retransmission 4 to 20mA, 0 to 1V or 0 to 10V link selectable
Transmitter supply:	18VDC (25mA maximum)
Relay action:	Programmable N.O. or N.C.

Output Options

2nd relay:	Same specs as relay 1
2nd, 3rd and 4th relays:	Form C rated 5A resistive
DC voltage out:	Isolated 24V ($\pm 12\text{V}$), 20mA

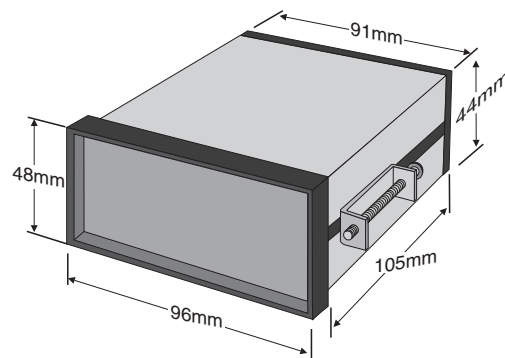
Physical Characteristics

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 option card

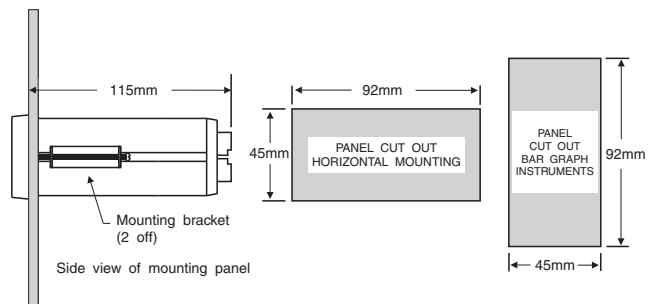
PM4-AM Accessories

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-AM case dimensions



PM4-AM panel mounting details



PM4-AM order codes

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

PM4-AM- [] - [] - A [] Note: Analog retransmission "-A" always fitted to PM4-AM

240	-----	240VAC
110	-----	110VAC
32	-----	32VAC
24	-----	24VAC
DC	-----	12-48VDC isolated
DCH	-----	50-110VDC isolated
Display type		
5E	-----	5 digit 14mm red led with front pushbuttons & annunciators
5BP	-----	Bargraph with 7.6mm red led and front pushbuttons
Optional outputs		
R	-----	2nd setpoint relay
R12	-----	2nd setpoint relay and 24V (+/- 12V) isolated transmitter supply
12	-----	24V (+/- 12V) isolated transmitter supply

Wiring diagrams and full operations manual are available from www.aicpl.com.au/pdf/pm4amman.pdf.