

Panel Mount PM4-LN 50 point lineariser



Scalable indication of $\pm 2\text{mA}$, $\pm 20\text{mA}$, $\pm 100\text{mV}$, $\pm 1\text{VDC}$,
 $\pm 10\text{VDC}$ or $\pm 100\text{VDC}$ or 3-wire Slidewire

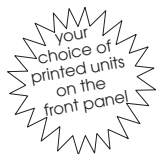
PM4 displays



5 digit LED 14.2mm digit height



6 digit LED 14.2mm digit height



Description

Model PM4-LN is a lineariser display which accepts DC inputs of $\pm 2\text{mA}$, $\pm 20\text{mA}$, $\pm 100\text{mV}$ to $\pm 100\text{V}$ or 3-wire slidewire, with the resultant display reading directly in engineering units.

The linearising function is used for non linear inputs. A good example is the indication of the contents of a cylindrical tank lying on its side. There is a non-linear relationship between the depth of liquid in the tank and the actual volume. The lineariser allows accurate figures to be entered and stored to reflect the actual contents. Up to 50 linearising points may be entered.

An external input is configurable to perform one of various functions e.g. zero, tare, peak hold, display hold, display toggle (from live to linearised display), setpoint only access or security lockout amongst others. This input can also be used to allow fast and easy access to the alarm setpoints. The front panel **P** button can also perform some of these functions.

Each instrument is supplied with a single setpoint relay and an 18VDC (max 25mA) transmitter supply as standard.

Optional outputs include additional relays and isolated analog retransmission, (4-20mA, 0-1VDC, 0-10VDC) or serial RS232/RS485 communications.

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

Features



Circular graph and 5 digit display



20 segment bargraph and 5 digit display

- 50 point lineariser
- EEPROM storage of lineariser table values
- Pushbutton calibration and setup
- Displays in engineering units
- Isolation between input signal/supply and retransmission
- Rugged enclosure
- 240V, 110V, 32V, 24V AC, 12 to 48V DC or 50 to 110 V DC operation (factory configured)
- Alarm/control relay output (5A)
- 18VDC transmitter supply
- Remote input to perform a special function e.g. brightness level, fast setpoint access, zero, tare, display toggle, peak/display hold, setpoint only access or security lockout
- 2 year guarantee

PM4LN-3.4-0

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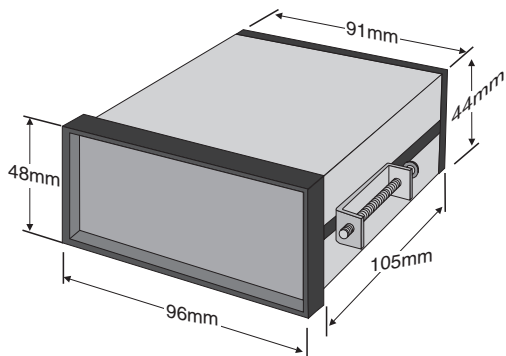
e-mail: sales@aicpl.com.au
Internet: www.aicpl.com.au

Specifications

Technical Specifications

Input types:	Link selectable $\pm 20\text{mA}$, 4 to 20mA or $\pm 100\text{mV}$, $\pm 1\text{V}$, $\pm 10\text{V}$, $\pm 100\text{V}$ DC or 0-1k Ω to 0-1M Ω 3-wire slidewire
Impedance:	135 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. 6 digit 14.2mm, keypad LED bar graph 20 segment bar, 5 digit display, keypad 16 segment circular "bargraph", 5 digit display, keypad LCD models: 4 digit 12.7mm 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
Transmitter supply:	18VDC (25mA maximum)- standard
Relay action:	Programmable N.O. or N.C.
Output Options	
Extra relays:	Same specs as relay 1 (form C optional)
Retransmission:	Analog 4 to 20mA, 0 to 1V or 0 to 10V link selectable Serial RS232 or RS485, choice of ASCII or Modbus RTU protocols Digital Binary or BCD
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
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-LN case dimensions



PM4-LN Order Codes

PM4-LN - <input type="text"/> - <input type="text"/> - <input type="text"/>	
Power Supplies	
PM4-LN - <input type="text"/> - <input type="text"/> - <input type="text"/>	
240VAC	<input type="text" value="240"/>
110VAC	<input type="text" value="110"/>
32VAC	<input type="text" value="32"/>
24VAC	<input type="text" value="24"/>
12 to 48VDC	<input type="text" value="DC"/>
50 to 110VDC	<input type="text" value="DCH"/>
Display Type	
PM4-LN - <input type="text"/> - <input type="text"/> - <input type="text"/>	
5 DIGIT LED + KEYPAD & ALARM LEDs	<input type="text" value="5E"/>
6 DIGIT LED + KEYPAD	<input type="text" value="6E"/>
BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	<input type="text" value="5BP"/>
CIRCULAR BARGRAPH + 5 DIGIT DISPLAY + KEYPAD	<input type="text" value="5GP"/>
Options	
PM4-LN - <input type="text"/> - <input type="text"/> - <input type="text"/>	
ANALOG (4-20mA, 0-1V or 0-10V selectable)	<input type="text" value="A"/>
RS232	<input type="text" value="2"/>
RS485	<input type="text" value="4"/>
BCD/Binary NPN	<input type="text" value="DN"/>
BCD/Binary PNP	<input type="text" value="DP"/>
DC VOLTAGE OUTPUT 24V ($\pm 12\text{V}$)	<input type="text" value="12"/>
1 EXTRA RELAY	<input type="text" value="R"/>
3 EXTRA RELAYS	<input type="text" value="RRR"/>

The valid optional output combinations for PM4-LN models are:

-R12, -AR, -ARRR, -A12, -AR12,
-AR6, -A2, -A2R, -A4, -A4R, -2R, -212, -2R12, -4R, -412,
-4R12, -DNR, -DN12, -DNR12, -DPR, -DP12, -DPR12

PM4-LN 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-LN panel mounting details

