

Intelligent PM4 monitors

Model PM4-SSI

Synchronous Serial Interface (SSI) 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



8 digit LED 10mm digit height



6 digit LCD 12.7mm digit height



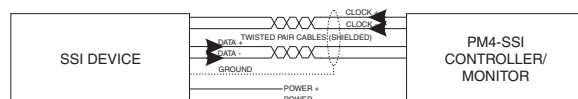
Circular graph and 5 digit display



20 segment bargraph and 5 digit display



Laser distance measuring device or absolute position encoder etc.



Description

SSI communication is typically used in non contact measurement. Long transmission distances (up to 1.2km) are possible when connecting to SSI devices. Devices available with SSI output include position encoders and laser distance measuring equipment. The data transmitted is in the form of a binary or Gray code (up to 31 bits).

The serial communications is externally activated via clock pulses generated by the PM4-SSI. Shielded twisted pair wire should be used for the clock and data lines and two wires are required for the power supply.

When used with AIC model RM-BC or RM4-BC converters the PM4-SSI may be used as Binary/BCD/Gray code display. The PM4-SSI panel meter can be programmed to scale the input signal to give a display in engineering units e.g. "metres".

Two sets of scaling values can be programmed e.g. "metres" and "millimetres", with scale selection being via an external switch.

All scaling and setup programming of the PM4-SSI is accomplished via pushbuttons.

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

Features

- Synchronous Serial Interface (SSI) input
- Pushbutton programming
- Alarm relay output standard
- Rugged construction
- 240V, 110V, 32V, 24V AC, 12 to 48 V DC or 50 to 110 V DC operation (factory configured)
- 2 year guarantee
- External input to provide one of the following special functions: Peak hold, Display hold, Peak high/low memory, Select second set of scaling values, Brightness switching, fast setpoint access, setpoint only access or security lockout
- Can be used with RM-BC or RM4-BC to display from BCD/Binary/Gray Code sources
- Wide range of options available:
 - Single or dual analog retransmission
 - Additional setpoint relays
 - RS232 or RS485 serial communications
 - Isolated transmitter supply 24VDC (± 12 VDC)

PM4SSI-3.3-0

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Specifications

Technical Specifications

Input: Synchronous Serial Interface (SSI) Binary or Gray Code - up to 31 bits

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

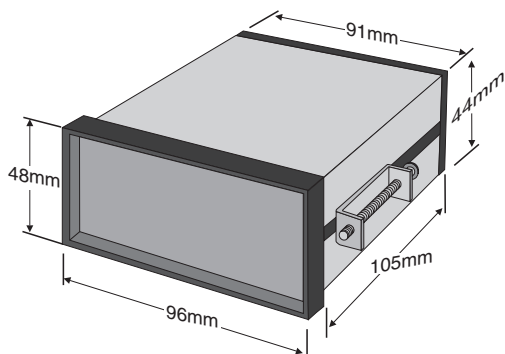
PM4-SSI Order Codes

PM4-SSI - [] - [] - []	
Power Supplies	
PM4-SSI - [XXX] - [] - []	
240VAC	240
110VAC	110
32VAC	32
24VAC	24
12 to 48VDC	DC
50 to 110VDC	DCH
Display Type	
PM4-SSI - [] - [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-SSI - [] - [] - [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	AR6

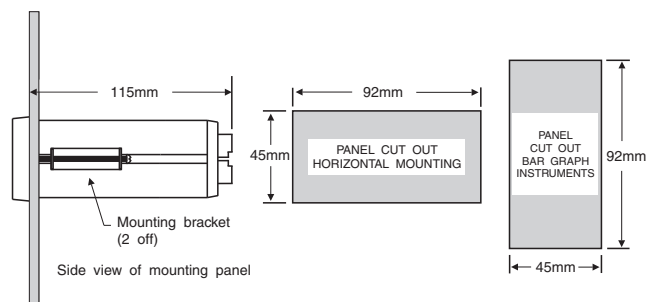
PM4-SSI Accessories

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-SSI case dimensions



PM4-SSI panel mounting details



Wiring diagrams and full operations manual are available from www.aicpl.com.au/pdf/pm4ssima.pdf.