

Wind Speed and Direction Monitor

Wind speed & direction display from sensors with analog output or NEMA serial output.

Description

The panel mount wind speed and direction monitors have been designed to provide compact, accurate and easily understood displays for wind speed and direction.

The wind speed is displayed on a 5 digit LED display and the wind direction is represented on a 16 position circular LED display. Four annunciator LEDs are available to display alarm conditions.

The circular display gives a quick visual representation of the wind direction. The wind direction is averaged over a configured time to prevent the display "jumping" from point to point.

For sensors with 2 x 4-20 mA outputs the model number is PM4-IV3-XXX-5GP where the "XXX" is the code for the monitor power supply.

A special model is available for sensors which have a NEMA standard coded serial output. The model number for use with these sensors is PM5-RS-XXX-5GP where, again, the "XXX" is the code for the monitor power supply.

The monitor display includes 4 alarm annunciator LEDs. The wind speed & direction monitors have one setpoint relay as standard and up to another 3 can be fitted.

Dual analog retransmission can be fitted to either model to allow the wind speed and the wind direction to be separately transmitted to a PLC or other control device.



Features

- Versatile, scalable circular display for wind direction.
- 5 digit numerical display for wind speed can be scaled to required units
- Available for analog output sensors (4-20 mA) or input from NMEA sensor
- 240V, 110V, 32V, 24V AC, 12 to 48 V DC or 50 to 110 V DC (factory configured)
- Alarm/control relay output (1 is standard)
- 2 year guarantee

Options

- Extra relay outputs (5A) - Add 1 or 3 extra relays.
- Optically isolated analog retransmission (4-20mA, 0-1V, 0-10V) single or dual output versions available
- RS232 or RS485 serial communications, choice of ASCII or Modbus RTU protocols.



PM4WIND-1.2-0

AMALGAMATED INSTRUMENT CO PTY LTD

ACN: 001 589 439

Unit 5, 28 Leighton Place Hornsby
NSW 2077 AUSTRALIA

Telephone: +61 2 9476 2244
Facsimile: +61 2 9476 2902

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

SPECIFICATIONS

Specifications are subject to change without notice

TECHNICAL SPECIFICATIONS

- PM4-IV3-XXX-5GP

Input types: 4 to 20mA
 Impedance: 80Ω
 ADC resolution: 1 in 20,000

- PM5-RS-XXX-5GP

Input RS232 or RS485 NEMA coded data stream. (Factory configured input type)

COMMON SPECIFICATIONS

Microprocessor: MC68HC11 CMOS
 Ambient temp: -10 to 60°C
 Humidity: 5 to 95% non condensing
 Display types: 16 segment circular LED display + 5 digit numerical display + 4 way keypad and annunciator LEDs
 Power supply: AC 240v, 110V, 48V, 32V, 24V 12 to 48V DC or 50 to 110 V DC (factory configured)
 Power usage: AC supply 4 VA max, DC supply, depends on display type & options
 Output (standard): 1 x relay, form A, rated 5A resistive
 Relay action: Programmable N.O. or N.C.

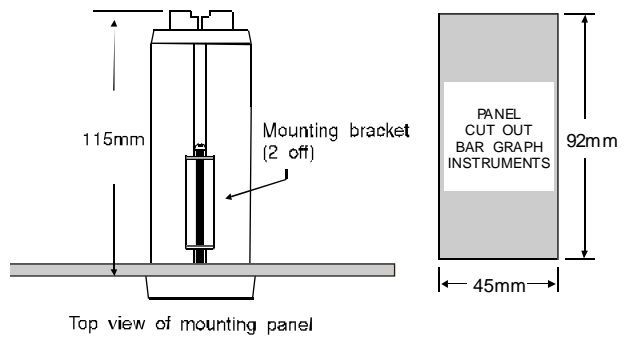
OUTPUT OPTIONS

Extra relays: Same specs as relay 1 (form C optional)
 Retransmission: **Analog:** 4 to 20mA, 0 to 1V and 0 to 10V link selectable (single or dual output versions)
Serial: RS232 or RS485, choice of ASCII or Modbus RTU protocols

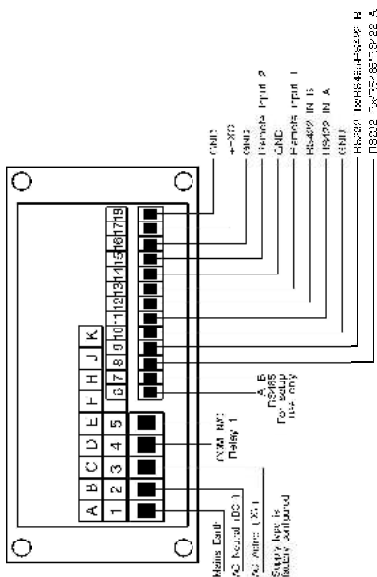
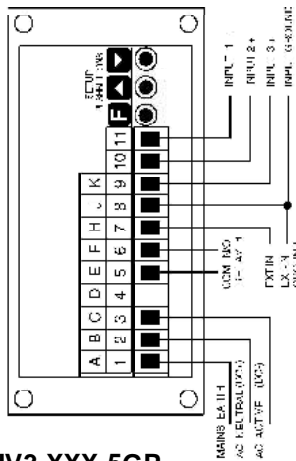
PHYSICAL CHARACTERISTICS

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 2.5mm² wire)
 Weight: 400 gms basic model, 450 gms with option card

PANEL MOUNT INSTALLATION



ELECTRICAL CONNECTIONS



ORDER CODE

PM4-IV3- - 5 G P -
 PM5-RS- - 5 G P -

POWER SUPPLY

PM4-IV3- - 5 G P -
 PM5-RS- - 5 G P -
 240 VAC 2 4 0
 110 VAC 1 1 0
 48VAC 4 8
 32 VAC 3 2
 24 VAC 2 4
 12 to 48 VDC D C
 50 to 110 VDC D C H

DISPLAY TYPE - Circular graph & 5 digit display is standard

PM4-IV3- - 5 G P -
 PM5-RS- - 5 G P -
 CIRCULAR BARGRAPH + 5 DIGIT DISPLAY
 + KEYPAD + ALARM ANNUNCIATOR LEDs 5 G P

RETRANSMISSION OUTPUT

PM4-IV3- - 5 G P -
 PM5-RS- - 5 G P -
 ANALOG (4-20mA, 0-1V, 0-10V selectable) A A
 DUAL ANALOG A A
 RS232 2
 RS485 4

2ND RELAY OUTPUT for PM4-IV3-XXX-5GP

PM4-IV3- - 5 G P - R

EXTRA RELAY OUTPUTS FOR PM4-RS-XXX-5GP

2ND RELAY OUTPUT
 PM5-RS- - 5 G P - R
 2nd, 3RD & 4TH RELAYS OUTPUTS
 PM5-RS- - 5 G P - R R R