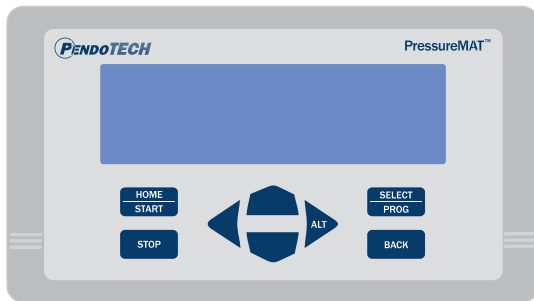


PressureMAT™ System



- Designed for PendoTECH Single Use Pressure Sensors
- Perfect for use with filtration and chromatography processes, as well as bioreactor pressure monitoring
- Data output capability to a PC or control system
- User configurable min/max set-points with alarm output signal
- Panel mount option with NEMA4X Front Panel

The PressureMAT™ is a monitor, alarm, and transmitter system designed for use with the PendoTECH Single Use Pressure Sensors. It is comprised of the control system box with user interface and the connectors on the back panel where input and output components can be interfaced. Options include models with up to four pressure sensor inputs. The PMAT3 model can optionally display Delta-Pressure of P1-P2 or trans-membrane pressure (TMP) for filtration processes. These calculated values can also have alarm set-points and the values can be transmitted.

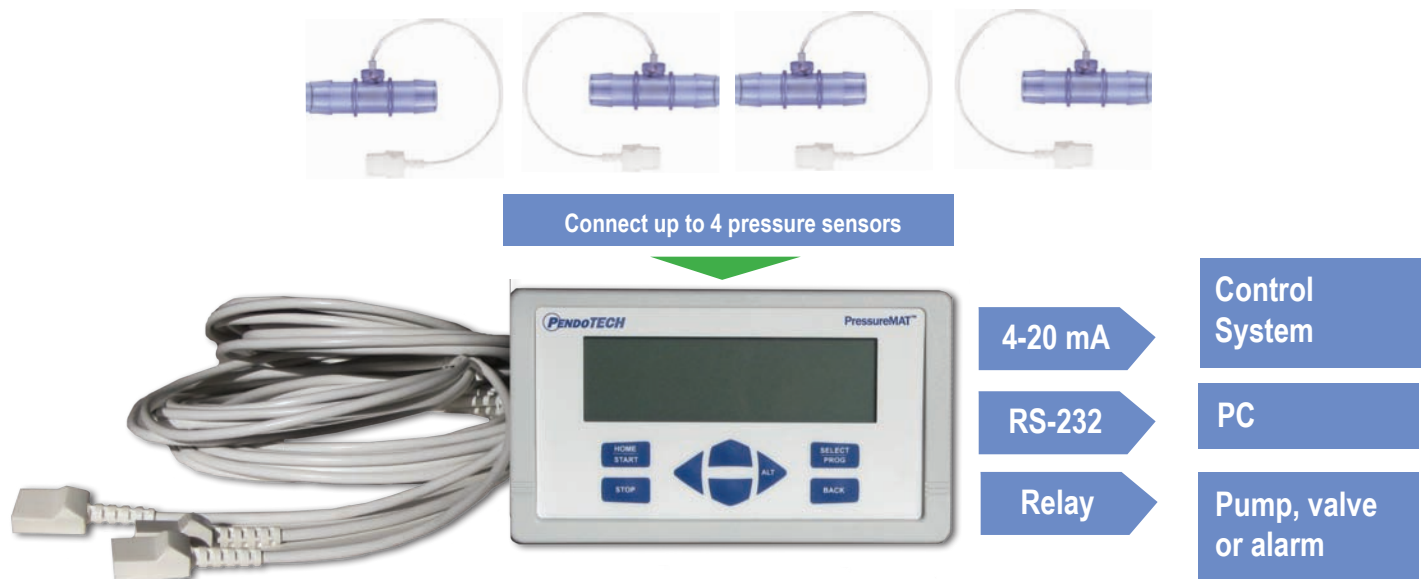
Monitor - the process pressure is displayed on the LCD display. There is one-touch zero tare to atmospheric pressure.

Alarm - minimum and maximum pressures are entered on the key pad and if the process pressure goes below the minimum setting or above the maximum setting, the system will go into alarm state.

Transmitter - the transmitter function delivers a 4-20 milliamp output signal corresponding to the pressure reading on the display. The RS-232 data output to a PC is available for data collection to the PMAT Data Acquisition Software.

Applications - there are numerous applications in biopharmaceutical production processes where the system can be used to monitor pressure, including filtration, chromatography processes, and bioreactor monitoring.

PressureMAT™ - for Monitoring up to Four Sensors



PressureMAT™ System Includes:

- Control System
- Cable(s) for connection of pressure sensor(s) to the control system
- Power Supply
- Connectors for field wiring
- Mounting Screws
- User Guide

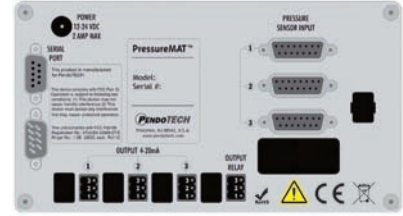


Illustration: Back panel schematic of PMAT3

System Specifications

System Component	Specifications
Enclosure	WxDxH: 7.86" x 4.47" x 2.25" (19.96 x 11.35 x 5.72 cm) Approximate weight: 1.3 lbs (0.65 kg), Material: ABS Plastic NEMA 4X front panel; panel and wall mount optional
Keypad	8 button keypad with LEXAN® overlay
Display	8 line LCD backlit blue, pressure displayed as X.X psi / X.XX bar
Power Inlet	2.5 mm Circular Power Jack (center post positive) 12-24 volts DC, 4 Watts (powered by wall supply)
Pressure Sensors Input (s) Models offered with 1-4 inputs	Range of -7.0 to 75.0 psi Configured for PendoTECH Single Use Pressure Sensors™, Connector: DA15
Relay Outputs(s) [Up to 4 outputs available as a combination of Relay and Analog outputs]	Specifications for relay used for the alarm output: <ul style="list-style-type: none"> • Normally CLOSED or OPEN via wiring • 1 amp closure, 2 amps maximum current • Screw terminal connector <ul style="list-style-type: none"> • 28 Volt AC/DC Maximum • 20 mS max turn on/off time
Analog Output(s) [4-20 mA] [up to 4 outputs available as a combination of Relay and Analog outputs]	Screw terminal connector 4-20 mA Range: -10 to 75 psi (-0.689 bar to 5.171 bar) Accuracy: 0.1% of full scale Sourcing with Maximum Load: 400 ohms Load Impedance: Zero Ohm minimum resistance, 20 mA maximum output (even if pressure exceeds 5.17 bar)
RS232 Output	Data output to a PC at frequency up to 1/sec.; Optional Internal Data Logger: Part# PDKTP-DLOG
Regulatory Compliances	CE Mark EN61326-1 FCC Part 15 Class B verified FCC Part 68 5TUUSA-23969-DT-E

Ordering Information

Model Number	Number of Inputs	Number of Outputs	Outputs
PMAT 1	1	2	1 Relay / 1 Analog
PMAT 2	2	4	2 Relays / 2 Analog or 4 Relays
PMAT 3	3	4	3 Analogs / 1 Relay (for all sensors)
PMAT 4	4	4	4 Analogs
PMAT 4R	4	4	4 Relays



PMAT-STND	PressureMAT Benchtop Stand
PMAT-GUI	Data Acquisition and Trending Software for PressureMAT
PDKTP-RS232U	RS232 Cable for PressureMAT data output (6 feet / 2M) for USB input to PC
PDKTP-DLOG	PressureMAT Internal Data Logger
PMAT-WALL4	PressureMAT water-tight wall mount box with water-tight cable connections for PMAT4