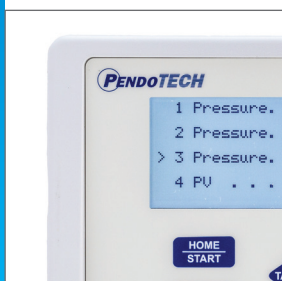


## Control Multiple Bioprocess Steps With Ease and Efficiency



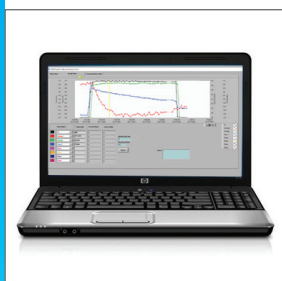
### Multi-Functionality

Acts as a monitor, alarm, and transmitter unit, providing comprehensive pressure monitoring solutions.



### Process Monitoring

Enables setting alarm points for calculated values such as Delta-Pressure or TMP, ensuring critical parameters are maintained within desired ranges.



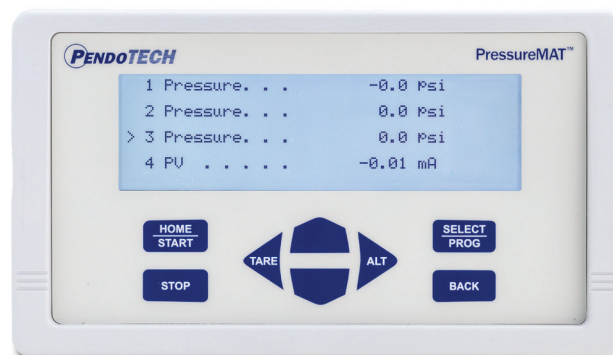
### Real-Time Data Transfer and Monitoring

The RS-232 data output allows for data transfer to a PC, facilitating real-time data collection with the PMAT Data Acquisition Software (PMATP-GUI).



### Portability

The lightweight and portable design facilitates easy movement within labs or pilot plants, enhancing operational flexibility.



### Revamp Your Bioprocessing with Our PressureMAT Sensor Monitor Device for All Critical Steps

The METTLER TOLEDO Pendotech PressureMAT (PMAT) integrates with Pendotech Single-Use Pressure Sensors for biopharmaceutical production, including filtration and chromatography. Its portable, lightweight design facilitates easy movement in labs or pilot plants, making pressure measurement efficient. Available in models with up to four pressure inputs, the PMAT3 and PMAT4 can display Delta-Pressure or trans-membrane pressure and feature alarm set-points for monitoring. With an IP66/NEMA4X front panel, it offers durability against environmental factors, and the High Resolution model provides tenfold accuracy for low-pressure applications. The system complies with industry standards, ensuring safety and regulatory alignment.

<b>Specifications</b>	
Enclosure (WxHxD):	7.86inch x 4.47 inch x 2.25 inch (19.96 x 11.35 x 5.72 cm) Approximate weight: 1.3 lbs (0.65 kg), Material: ABS Plastic IP66 / NEMA 4X front panel; panel and wall mount optional PMAT-S: 4.70inch x 4.70inch x 2.25inch (11.94 x 11.94 x 5.72 cm) Approx weight: 0.86lbs (0.39kg)
Keypad	8 button keypad with LEXAN® overlay
Display	8 line LCD backlit blue, pressure displayed as X.X psi/X.XX bar; PMAT4HR, PMAT2HR & PMAT-SHR X.XXX psi/X.XXX bar
Power Inlet	2.5mm Circular Power Jack (center post positive) or D9 12-24 volts DC, 4 watts (powered by wall supply)
Pressure Sensors Input (s) Models offered with 1-4 inputs	Range of -11.5 to 75.0 psi; (-0.793bar to 5.171 bar) PMAT4HR, PMAT2HR & PMAT-SHR -0.7 to 7.5 psi (-0.0483 bar to 0.510 bar) Configured for Pendotech Single Use Pressure Sensors™, Connector: DA15 (includes 12 ft reusable cables)
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"> <li>• Normally CLOSED or OPEN via wiring</li> <li>• 28 Volt AC/DC Maximum</li> <li>• 1 amp closure, 2 amps maximum current</li> <li>• 20 millisecc max turn on/off time</li> <li>• Screw terminal connector</li> </ul>
Analog Output(s) [4-20 mA] [up to 4 outputs available as a combination of Relay and Analog outputs]	Screw terminal connector 4-20mA Range: -10 to 75 psi (-0.689bar to 5.171 bar); PMAT4HR, PMAT2HR & PMAT-SHR -1 to 3 psi (-0.069bar to 0.207 bar) Accuracy: 0.1% of full scale Sourcing with Maximum Load: 400 ohms Load Impedance: Zero Ohm minimum resistance, 22mA maximum output
RS232 Output	Data output to a PC at a frequency up to approx every 2 seconds Optional Internal Data Logger: Part# PDKTP-DLOG (logger not available with PMAT-S)
Regulatory Compliances	CE Mark EN61326-1:2021; EN61010-1:2010/A1:2016/C2019; EN/ISO13849-1:2015; EN60204:2018 FCC Part 15 Class B verified FCC Part 68 5TUUSA-23969-DT-E RoHS and REACH Compliant UL Listed
<b>Accessories for Ingress Ratings</b>	
NEMA4X/IP66 (Front panel only)	Every PMAT model has a NEMA4X/IP66 rated front panel
NEMA4X/IP66 (When panel mounted)	Every PMAT model is NEMA4X/IP66 rated when panel- mounted with panel mounting kit (PMAT-PANEL) and additional silicone sealant (PDKT-SIL-SEAL1)
UL Type 4X	Every PMAT model is rated UL type 4X when mounted with a specific window kit accessory (PMAT-ULT4X-W1)

**Monitor** - Pressure values are displayed on the LCD screen. There is a one-touch zero tare function to set the pressure to atmospheric pressure.

**Alarm** - Minimum and maximum pressure values are entered via the keypad. If the process pressure falls below the minimum setting or exceeds the maximum setting, the system will trigger an alarm state. This alarm state can be linked to the relay output to help ensure the integrity of the process.

**Transmitter** - The transmitter operates by delivering a 4-20 milliamp output signal that corresponds to the pressure reading displayed. Additionally, it provides an RS-232 data output to a PC, which is compatible with Pendotech PMAT Data Acquisition Software for seamless data collection.

## Ordering Information

Number of Inputs	Number of Outputs	Outputs	Model Nr.
1	2	1 Relay / 1 Analog	PMAT-S
1	2	1 Relay / 1 Analog	PMAT-SHR
2	4	2 Relays / 2 Analog or 4 Relays	PMAT2
2	4	2 Relays / 2 Analog or 4 Relays	PMAT2HR
3	4	3 Analogs / 1 Relay (for all sensors)	PMAT3
4	4	4 Analogs	PMAT4A
4	4	4 Relays	PMAT4R
4	4	4 Analogs	PMAT4HR

Software	Order Nr.
Data Acquisition and Trending Software for PressureMAT and CMONT with 2 USB/serial cables to connect to a PC	PMATP-GUI
PressureMAT Internal Data Logger (not available with PMAT-S)	PDKTP-DLOG

Stands/Cart	Order Nr.
PressureMAT Benchtop Stand for all models	PMAT-STND
PressureMAT stand to mount on top of Masterflex L/S Pump	PMAT-STND-MFLS
PressureMAT stand to mount on top of Watson Marlow 500 Series (green) Pump	PMAT-STND-WM5
PressureMAT water-tight box (PMAT NOT included) with water-tight cable connections and cart with power strip & filter holder with optional touch-screen PC with Data Acq Software	PMAT-CART4

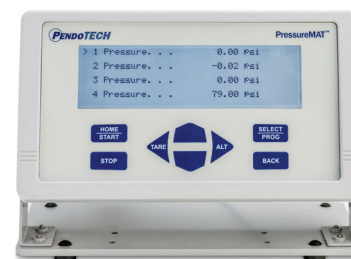
Water Tight Enclosure	Order Nr.
PressureMAT water-tight wall mount box with water-tight cable connections	PMAT-WALL
PressureMAT water-tight bench top stainless steel box with water-tight cable connections for PMAT on left side	PMAT-BNCH-IP-L
PressureMAT water-tight wall mount box with water-tight cable connections - holds 2 PressureMATs	PMAT-WALL2
PressureMAT-S single channel water-tight wall mount box with water-tight cable connections for PMAT	PMAT-WALL-S
PressureMAT, CMONT with UV Optional water-tight bench top stainless steel box with water-tight cable connections on left side	PMAT-BNCH-COMBO
PressureMAT UL Type 4X Deep-Hinged window kit with a viewing area of 8 inch X 9 inch (UL®)	PMAT-ULT4X-W1
PressureMAT Silicone Sealant cartridge, clear, 10.1oz for panel mount installation	PDKT-SIL-SEAL1

Cables	Order Nr.
RS232 Cable for PressureMAT data output (6 ft / 2 M) for USB input to PC	PDKTP-RS232U
Cable adaptor with D15 for Single Use Pressure Sensor for PMAT (12 ft/4 M)	PMAT-650-298
Cable Adapter with D15 for Single Use Pressure Sensor for PressureMAT (24 ft/7 M)	PMAT-650-298-24F
Pressure Sensor Extension Cable (12 ft/4 M)	PMAT-EXT-12F
RS232 Serial to USB adapter, for PMAT Wall/ Benchtop box, 7 ft	PMAT-WALL-RS232USB
PMAT Enclosure Box replacement power supply, 12VDC w/ global plug blades	PMAT-PWR-WALL-24VDC

Pump Starts/Stop Cables	Order Nr.
Interface cable for Masterflex LS pump- D9 connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-MF9B
Interface cable for Masterflex LS pump- D15 connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-MF15



PMAT-S



PMAT-STND



PMAT-EXT-12F

## Ordering Information - continued

<b>Pump Starts/Stop Cables - continued</b>	<b>Order Nr.</b>
Interface cable for Masterflex IP pump- 18 pin connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-MF18
Interface cable for Masterflex LS pump- D25 connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-MF25
Interface cable for Masterflex IP pump- 31 pin connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-MF31
Interface cable for Watson Marlow 120U/DV pump- D15 connector to PMAT to start/stop function, 6 ft (2 M). (Also works on the 101 model)	PMAT-CB-WM15
Interface Cable for Watson Marlow pump D25 connector to PMAT to start/stop function, 6 ft (2 M)	PMAT-CB-WM25
Interface cable for QuattroFlow Q1200HT to PMAT start/stop function, 6 ft (2 M)	PMAT-CB-Q1200HT
<b>Accessories:</b>	<b>Order Nr.</b>
Pressure Checker pressure sensor and monitor verification tool, psi	PDKT-650-950
Pressure Checker pressure sensor and monitor verification tool, millibar	PDKT-650-950B
Test cable assembly for PressureMAT accuracy check	PMAT-TCA
Pressure sensor cable dust cover / zero simulator for PressureMAT	PDKT-650-298CVR
DIN rail mounting kit for PMAT-S	PMAT-S-DIN
Installation qualification/operation qualification protocol documentation	PMAT-IQ/OQ
PMAT Panel mount kit - 2 gaskets, 4 mounting brackets, 2 sensor cables, and input connectors for sensors and power	PMAT-PANEL-2-C
PMAT Panel mount kit - 2 gaskets, 4 mounting brackets, 3 sensor cables, and input connectors for sensors and power	PMAT-PANEL-3-C
PMAT Panel mount kit - 2 gaskets, 4 mounting brackets, 4 sensor cables, and input connectors for sensors and power	PMAT-PANEL-4-C
PMAT Panel mount kit - 2 gaskets, 4 mounting brackets, 1 sensor cable, and input connectors for sensor and power	PMAT-PANEL-S-C
PMAT2 Panel mount kit UPGRADE - 2 gaskets, 4 mounting brackets, 2 sensor cables (in replacement of standard cable), and input connectors for sensors and power	PMAT-PANEL-2-U
PMAT3 Panel mount kit UPGRADE - 2 gaskets, 4 mounting brackets, 3 sensor cables (in replacement of standard cable), and input connectors for sensors and power	PMAT-PANEL-3-U
PMAT4 Panel mount kit UPGRADE - 2 gaskets, 4 mounting brackets, 4 sensor cables (in replacement of standard cable), and input connectors for sensors and power	PMAT-PANEL-4-U
PMAT-S Panel mount kit UPGRADE- 2 gaskets, 4 mounting brackets, sensor cable (in replacement of standard cable), input connectors for sensor and power	PMAT-PANEL-S-U
Pendotech PressureMAT Power supply with circular barrel connector, 12VDC, 1amp with plugs blades for destination country	PMAT-PWR-12VDC
Pendotech PressureMAT Power supply with circular barrel connector, 24VDC, 0.625 amps with plugs blades for destination country	PMAT-PWR-24VDC
Pinch Valve Pair- 24VDC supply & relay input for each normally closed valve- Small for 1/8 inch ID	PDKT-PVE2-PMAT-S
Pinch Valve Pair- 24VDC supply & relay input for each normally closed valve - Medium for 1/4 inch ID	PDKT-PVE2-PMAT-M
Pinch Valve- 24VDC supply & relay input for normally closed valve - Small for 1/8 inch ID	PDKT-PVE-PMAT-S
Pinch Valve- 24VDC supply & relay input for normally closed valve - Medium for 1/4 inch ID	PDKT-PVE-PMAT-M



PMAT-TCA



PDKT-650-298CVR