Introduction
Congratulations
Thank you for purchasing TPI brand products. This meter is easy to use and is built to last. It is backed by a 3 year limited warranty. Please remember to return you product warranty registration card.
Product Description
The TPI 600 series is a hand held range of pressure meters and can be summarized as follows.

TPI 610 - Single Input - 4 Function - single unit of pressure
TPI 615 - Single Input - 7 Function - 7 units of pressure
TPI 620 ó Dual Input ó differential ó 4 Function ó single unit of pressure
TPI 625 ó Dual Input ó differential ó 7 Function ó 7 units of pressure
All these models measure over the range of -200.0 to +200.0 mbar. Each unit has increased resolution of 0.01 mbar and automatically auto-ranges at $\pm$ 19.00 mbar to 0.1 mbar resolution. Each model is supplied complete with carry pouch, battery and instruction manual.

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Safety Considerations
Warning: Please follow the manufacturer's test procedure whenever possible. Make sure the pressure to be measured is not outside the range of the TPI 610/615/620/625 meter

General Guidelines
<u>Always</u>
- Test the pressure meter before use to ensure it is operation properly
- Ensure that the connection hose you are using is free from kinks or splits
- Double check all connections before testing

<u>Never</u>
- Connect the Instrument to an unknown pressure source if the source is twice the working pressure of the instrument the sensor will be damaged and may cause injury to the user
- Tamper with the instrument or attempt to modify it in any way. Otherwise accident and injury may occur and the warranty becomes void.

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Technical Data
Controls TPI 610/615/620/625

ON   Present on all models switches instrument ‑On‑ for use
OFF   Present on all models switches ‑Off‑ after use
ZERO   Present on all models ‑Zero‑s‑ the display ready of use
=   Smoothing function to stabilize rapidly changing pressure readings
MAX   Enables the user to recall & display both the
MIN   maximum and minimum pressure recorded since the function was selected. Press button once to actuate, twice to read minimum and three times to read maximum. To cancel the function press ‑Zero‑ (**TPI 615/625 only**)
HOLD Maintains the reading on the LCD display (**TPI 615/625 only**)
UNITS Selects 7 units of pressure kPa, PSI, inHg, mmHg inH20, mbar (**TPI 615/625 only**)

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Features & Benefits

Autoranging - Provides high resolution & accuracy at low pressures where it is needed

Auto Power Off - Powers off after 40 minutes to conserve battery life.

Trim Mode - Smoothing function to stabilize erratic readings. It displays the average value of 4 values previously measured.

Zero Function - Provide immediate push-button zeroing for Speed and accuracy.

Record Max/Min- Enables long term testing of pressure circuit to check for leaks. (**TPI 615/625 only**)

Hold- Enables the user to freeze the display reading when working in cramped working conditions, when the display is not visible. (**TPI 615/625 only**)

Units- Change the display value in any one of the following engineering units. kPs, PSI, inHg, mmHg, inH20, mmH20 and mbar. (**TPI 615/625 only**)

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Pressure Conversion Table

	Atmos	Bars	inHg (0°C)	inH20 (4°C)	Lb/in2 (PSI)	mmHg (torr)	mmH20	Pascals
Atmos	1	9.86923×10^{-1}	3.34207×10^{-2}	2.458×10^{-3}	0.068046	1.316×10^{-3}	0.9677×10^{-4}	9.869×10^{-6}
Bars	1.01325	1	3.3864×10^{-2}	2.491×10^{-3}	6.8948×10^{-2}	1.333×10^{-3}	0.9807×10^{-4}	1.000×10^{-5}
inHg (0°C)	29.9213	29.53	1	7.355×10^{-2}	2.036	3.937×10^{-2}	2.89567×10^{-3}	2.953×10^{-4}
inH20 (4°C)	406.8	401.48	13.60	1	27.68	0.5354	3.937×10^{-2}	4.014×10^{-3}
Lb/in2 (PSI)	14.695955	14.504	0.4912	3.6127×10^{-2}	1	1.934×10^{-2}	1.422323×10^{-3}	1.4503×10^{-4}
mmHg (torr)	760	750.06	25.400	1.868	51.715	1	7.35433×10^{-2}	7.502×10^{-3}
mmH20	10.33272×10^{3}	10.1976×10^{3}	3.4544×10^{2}	25.400	703.07	13.599	1	0.1019556
Pascals	1.01325×10^{5}	1.000×10^{5}	3.386×10^{3}	2.491×10^{2}	6.8948×10^{3}	1.333×10^{2}	9.8071	1

Step by Step Procedures

- Press the ‑ON‑ Key and the LCD display will be activated if it does not read 0.00 proceed as follows
- Press the ‑ZERO‑ key and the display should zero within +/- 0.05 if not repeat until it does
- Connect pressure meter to installation or equipment to be tested using appropriate hose connection in accordance with the manufacturers instructions
- The pressure reading will appear on the display. To activate the backlight in poor light conditions press the ‑ON‑ key at any time
- If the reading is erratic or changing activate the smoothing function by pressing the ‑≈‑ key
- To freeze a reading in awkward or cramped working spaces press the ‑HOLD‑ key (**TPI 615/625 only**)
- To record maximum & minimum pressures when establishing pressure decay or carrying out gas line soundness testing press the ‑MAX/MIN‑ key (**TPI 615/625 only**)
- To convert the displayed pressure reading to another engineering unit depress the ‑UNIT‑ key anytime and scroll through to the desired units of pressure. (**TPI 615/625 only**)

Accessories & Specifications
Standard accessories Part No
9V battery   A009
Soft Pouch   A600
Silicone Tube w/ ¼ö barbed 1/8ö NPT fitting A603
Optional Accessories Part No
3 metre (6 ft) nitrile rubber tubing   A601
Large Zipped pouch   A904

Specifications

Model Features	TPI 610	TPI 615	TPI 620	TPI 625
Auto Range	-200.0 mbar to -200.0 mbar			
Accuracy	$\pm$ (0.5% of reading + 5 Digits)			
Over Pressure	500 mbar			
Power Supply	9V			
Relative Humidity	0% to 80% (0°C to +40°C)			
Operating Temp.	0°C to +40°C			
Storage Temp.	-10°C to +50°C			
Auto Power Off	20 Minutes			
Input Type	Single	Single	Differential	Differential
Trim Mode	Yes	Yes	Yes	Yes
Zero Adjust	Yes	Yes	Yes	Yes
Record Min/Max	No	Yes	No	Yes
Units	1	7	1	7
Data	No	Yes	No	Yes
In units there are kPa, PSI, inHG, mmHg, inH20, mmH20, mbar				

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Maintenance
Battery Replacement:
The 610/615/620/625 will display a ⊒BATø symbol when the internal 9V battery needs replacement. Replace battery as follows:

1. Ensure instrument is switched off
2. Loosen the six cross head screws on the back of the instrument
3. Remove the back cover
4. Remove old battery
5. Replace with new battery 9V NEDA 1604 or equivalent
6. Reassemble the instrument in reverse order from above being sure not to trap any wires between the two helves of the case
7. Re-fit the six cross head screws being sure not to over tighten

Cleaning: Use a mild detergent and a slightly damp cloth to clean the surfaces of the instrument.

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Trouble Shooting Guide

Problem   Probable Cause

Unit does not zero   Zero button has not been operated

Unit still does not zero   If reading is greater than 0.05 and constantly fluctuation return to local service centre.

‒Batø appears on display   Replace battery immediately 9V NEDA 1505 or equivalent

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EC Declaration of Conformity

This is to certify that model 610/615/620/625 conform to the protection requirements of the council directive 89/336/EEC, in the approximation of laws of the member states relating to Electromagnetic compatibility be application of the following standards

EN50081-1 1992 Emissions Standard

EN50082-1 1992 Immunity Standard

To ensure conformity with these standards, this instrument must be operated in accordance with the instructions and specifications given in this manual.

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3 Year Warranty

Warranty Statement

This TPI product is warranted to the purchaser against defect is materials and workmanship for 3 years from the date of purchase.

Covered by TPI: Repair parts and labor; or replacement of the product at the option of TPI. Normal transportation charges to the purchaser are also covered.

Not covered by TPI: Damage to the product which are the result of abuse, improper use or maintenance are not covered. Any other expense, consequential damages, incidental expenses including damages to property is not covered. Transportation expenses to the company are not covered.

To obtain warranty performance: include with the product your name, address, phone number, written description of the problem and proof of purchase date. Carefully package and return to the address printed on the front of this instructions leaflet.

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