



# PTM-1000

**DIFFERENTIAL PRESSURE TRANSDUCER FOR HIGHLY ACCURATE MEASUREMENTS  
WITHIN ELECTRONIC SYSTEMS**

The PTM-1000™ Pressure Transducer Module is a four-channel test instrument for measuring differential pressure in enclosures where air flow integrity is critical to proper performance. As the demand for more energy efficient cooling grows, the need for measuring the pressure at each source of heat generation will follow.



In thermal characterization applications, the PTM-1000 is capable of measuring pressure drop across channels in circuit cards and assemblies; differential pressure across Pitot tubes, orifice plates and venturi tubes; intake to exhaust pressure drop in forced convection cooling systems and pressure drop across in-line filters, to name a few.

The PTM-1000 Pressure Transducer Module includes user-friendly stagePRESSURE™ application software, which provides easy data viewing and logging. The user can save four channels of pressure data as a function of elapsed time for study of raw data history.

The system is available in two pressure ranges; 0-0.15 PSI and 0-0.30 PSI, the ideal for precise measurements within telecommunications, networking, embedded computing and other high performance electronic applications. Data accuracy is within 1% of the full scale. The pressure transducer is capable of measuring pressure at temperatures from -40° to 120°C with data accuracy within 1% of full scale.

The PTM-1000 pressure transducer connects to a PC via a USB socket to acquire power and data communications. It can be powered by a 5 volt power supply and provides four independent 0-5V analog output signals proportional to the pressure of each channel. These features enable the system to be easily integrated into other control circuits that require analog voltage as input signals.

ATS also offers its pressure transducer as a standalone board, the PTB-1000, for OEM applications or system integration.



**AVAILABLE PRESSURE RANGES**  
0-0.15 PSI, 0-0.30 PSI

**OPERATING TEMPERATURE RANGE**  
-40° to 120°C

**COMPENSATED TEMPERATURE RANGE**  
0 to 70°C

**STORAGE TEMPERATURE**  
-55° to 135°C

**CONNECTION TYPE**  
USB

**OVERALL DIMENSIONS (L X W X H)**  
233.17 mm x 144.38 mm x 60.02 mm  
(9.18" x 5.68" x 2.36")

## FEATURES:

- » **Highly Accurate**  
Provides accurate data to within 1% of the full scale
- » **Low Pressure Measurement**  
From 0-0.15 PSI or 0-0.30 PSI. Additional pressure ranges available as custom options from 0-100 PSI
- » **stagePRESSURE™ Software**  
User friendly application for easy data viewing and logging
- » **USB Connection**  
Provides power and signal communication
- » **0-5V Output Analog Voltage**  
For integration into control circuits that require analog voltage as input signals

## APPLICATIONS:

- » **Telecommunications**
- » **Networking**
- » **Embedded Systems**
- » **Automotive**
- » **Medical Instrumentation**
- » **Pneumatic Control**
- » **HVAC**
- » **Airflow Monitors**
- » **Thermal Management**

For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or **www.qats.com**