TRANSDUCER DISPLAY AND MONITOR

The TSI TRANSDUCER DISPLAY & MONITOR provides a scaleable digital display for transducers with current or voltage outputs. The monitor's variable time constant controls the response time of the display. High and low alarms can indicate readings outside of a user-defined range. These alarms can be audible, visual and/or remote via relay contacts. The TRANSDUCER DISPLAY & MONITOR also provides 500 mA of unregulated 12 VDC power to operate your transducer. The micro-processor-based design provides flexibility through menu-driven, field selectable options including signal input, full scale reading, time constant and alarm levels.



Field Selectable Options

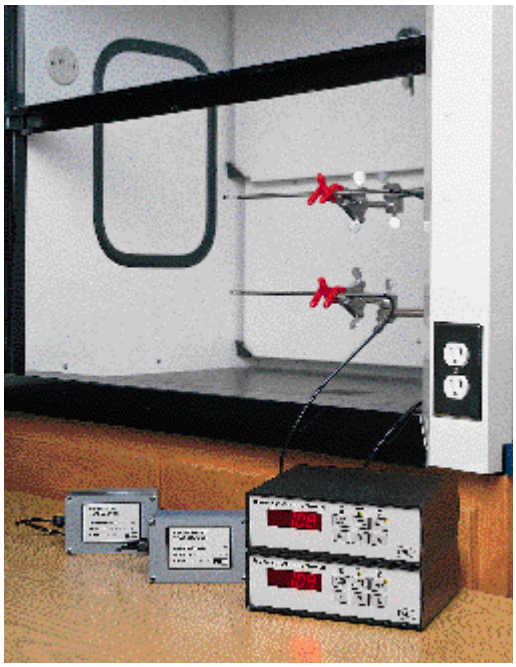
- Signal input (0-5 VDC, 0-10 VDC, 1-5 VDC, 2-10 VDC, 0-20 mA, 4-20 mA)
- Full scale reading (0.1000 to 99990)
- Zero adjust (0.1000 to 99.99)
- Span adjust (0.1 to 1.9)
- Low alarm (0 to full scale)
- High alarm (0 to full scale)
- Audible alarm/mute
- Time constant (1 to 20 seconds)
- Visual alarm latched or unlatched
- Relays latched or unlatched

The TRANSDUCER DISPLAY & MONITOR is an ideal accessory for TSI's Air Velocity Transducers, providing flexibility in outputs while also powering the transducer. The adjustable full scale reading allows you to scale the display to fit your application. For example, if mounting the transducer in a duct, you can select a full scale reading that includes a multiplication factor to convert to units of volumetric flow rate or even mass flow rate. The span adjustment can be used as a density correction factor, allowing you to correct the readings for changes in temperature or pressure. When using an air velocity transducer in a fluctuating flow, increasing the variable time constant will provide a more stable display of velocity or flow. If monitoring velocity or flow in a critical process application, using the high and low alarms will indicate readings outside of an acceptable range.

TSI®

When using the TRANSDUCER DISPLAY & MONITOR with the TSI CERTIFIER® Air Velocity Calibrator, the unit will display actual air velocity. Entering a density correction factor automatically converts the velocity to standard conditions. This allows the user to read air velocity directly from the Transducer Display & Monitor instead of reading pressure and then calculating velocity.

TSI instruments are backed by more than 30 years of experience in air flow measurement technology. It's this type of experience and innovation that provides you with accurate and reliable instruments. Along with TSI's expertise, each instrument is backed by a two year limited warranty and a great service policy. In addition to fast service, calibrations are NIST* traceable and a free certificate of calibration is included.



Specifications

Full Scale Value	Resolution
0.1000 to 1.0000	0.0001
1.000 to 10.000	0.001
10.00 to 100.00	0.01
100.0 to 1000.0	0.1
1000 to 10000	1
10010 to 99990	10

Accuracy:(1&2)	±.25% of reading ±1 digit of resolution
Time Constant:	1 to 20 seconds in 1 second intervals
Transducer Connections:	Detachable terminal strip
Display:	5 digit LED
Output Power:	12 VDC unregulated, supplies 500 mA minimum with TSI-supplied AC Adapter
Signal Input Ranges:	0-5VDC, 1-5VDC, 0-10VDC, 2-10VDC, 0-20mA, or 4-20mA
Temperature Stability:	0.003%/°C (0.0014%/°F)
Temperature Range:	0 to 50°C (32 to 122°F)
Input Impedance:	Greater than 500K Ω for 0-5 V input, greater than 1M Ω for 0-10 V input, 250 Ω for current input
Input Power:	11-30 VDC or 18-28 VAC, requires 500 mA maximum
Power Consumption:	19VA maximum
Housing:	ABS plastic
Dimensions:	20.3 cm × 15.8 cm × 6.5 cm (8.0 in. × 6.2 in. × 2.5 in.)

* National Institute of Standards and Technology.

[1] ±.02% of reading/°C = .01% of reading/°F away from 25°C.
[2] ±.025% of full scale = effect of EMI per IEC801-3.

Specifications subject to change without notice.
Specifications in parentheses ( ) indicate U.S. equivalents.

TSI Incorporated
Environmental Measurements and Controls Division
500 Cardigan Road
Shoreview, MN 55126 USA
Telephone: 800 777 8356
651 490 2711
Fax: 651 490 2874
E-mail: emco@tsi.com
Website: www.tsi.com

Europe:
TSI AB:
Telephone:46 18 527000
TSI GmbH
Telephone:49 241 523030

P/N TDM/INTL.97 Rev. A *Copyright © 1999 by TSI Incorporated* *Printed in U.S.A.*