

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

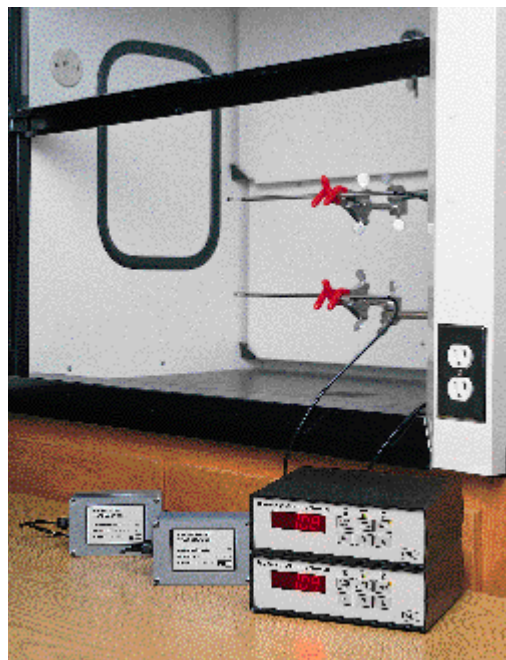
- Signal input (0-5 VDC, 0-10 VDC, 1-5 VDC, 2-10 VDC, 0-20 mA, 4-20 mA)
- Full scale reading (0.1000 to 99990)
- Zero adjust (0.1000 to 99.99)
- Span adjust (0.1 to 1.9)
- Low alarm (0 to full scale)
- High alarm (0 to full scale)
- Audible alarm/mute
- Time constant (1 to 20 seconds)
- Visual alarm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



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.



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