Transducer Display and Monitor



Model 8495

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 microprocessor-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 Model 8495 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 38 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

Model 8495

Resolution
0.0001
0.001
0.01
0.1
1
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 0.0014%/°F (0.003%/°C)

Temperature Stability 32 to 122°F (0 to 50°C) Temperature Range

Input Impedance Greater than $500\text{K}\Omega$ for 0-5 V input, greater than $1M\Omega$ for 0-10 V input, 250Ω

for current input

11-30 VDC or 18-28 VAC, requires 500 Input Power

mA maximum

19VA maximum Power Consumption Housing ABS plastic

8.0 in. \times 6.2 in. \times 2.5 in. **Dimensions** $(20.3 \text{ cm} \times 15.8 \text{ cm} \times 6.5 \text{ cm})$

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 metric equivalents.



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