VELOCITY AND TEMPERATURE MEASUREMENT SYSTEM

TVS-1000 Series
Starts at
$2574

Flexible Sensors
Thin Low Profile for Minimal Flow Disturbance
High Accuracy
Air Velocity and Temperature Measurements in One Sensor
Research Quality Results

The TVS-1004 and TVS-1008 automatic temperature and velocity scanners are portable, 4- and 8-channel hot wire anemometer systems. The TVS-1100 series are factory expandable for up to 32 total sensors. Fully automated, these research-quality instruments take accurate single- or multi-point measurements of air temperature, velocity and surface temperature in complex environments, such as PCBs and electronics enclosures. When used as temperature loggers, they can measure both fluid and solid temperatures.

The TVS-1000 series employ patented, fast response, omni-directional sensors, which measure both temperature and velocity. This patented single-sensor technology eliminates errors introduced as a result of air flow being non-isothermal. Each precisely calibrated sensor is flexible and robust with a low-profile configuration that allows minimally intrusive mounting throughout the peaks and valleys created by the PCB components. These systems require a PC to operate and utilize the provided software for data acquisition and reporting.

The candlestick style sensor, is a flexible, robust, base-and-stem design sensor that measures both temperature and air velocity for characterizing thermal conditions in electronic systems. The candlestick sensor is narrow and low profile to minimize the disturbance of the heat flow in the test domain. It features a flexible, plastic-sleeved stem, which facilitates installation and repositioning during the testing process. Sensors are calibrated for low (natural convection) and high velocity flows. They are capable of temperature measurements ranging from -30 to 150°C ±1°C. Velocity measurements range from 0 to 50 m/s (10,000 ft/min). The use of a single sensor to measure both temperature and velocity eliminates errors that can occur when airflow is non-isothermal. Multiple candlestick sensors can be easily installed to thoroughly map a system’s thermal and airflow conditions. Their robust nature allows for continuous repositioning and reading.
SPECIFICATIONS

Scanners

Power: 115 to 40 Vac, 1 to 5A, 60-50 Hz
Max No of Channels: 4 for TVS-1004; 8 for TVS-1008
Temperature Range: -30 to 150°C ±1°C (-22 to 302°F) ±3°F
Velocity Range: 0 to 50 m/s (10,000 ft/min) ±2% at velocity
Sensors: Up to 8 with the TVS-1008; Up to 4 with the TVS-1004; TVS-1100 series are factory expandable for up to 32 channels
Measurement Duration: Depends upon the PC storage limitation in the save file mode, unlimited without saving data
PC Software with thermal analysis module
Computer Interface: RS232 Port w/USB adaptor

To Order (Specify Model Number)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Price</th>
<th>Description</th>
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<tbody>
<tr>
<td>TVS-1004</td>
<td>$2574</td>
<td>4 velocity/temperature sensors, scanner and software</td>
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<tr>
<td>TVS-1008</td>
<td>3928</td>
<td>8 velocity/temperature sensors, scanner and software</td>
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<tr>
<td>TVS-1108</td>
<td>5880</td>
<td>8 velocity/temperature sensors, scanner and software factory expandable</td>
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<tr>
<td>TVS-1112</td>
<td>7454</td>
<td>12 velocity/temperature sensors, scanner and software factory expandable</td>
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<td>TVS-1120</td>
<td>10,699</td>
<td>20 velocity/temperature sensors, scanner and software factory expandable</td>
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<tr>
<td>TVS-1132</td>
<td>15,591</td>
<td>32 velocity/temperature sensors, scanner and software</td>
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Accessories

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<th>Model No.</th>
<th>Price</th>
<th>Description</th>
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<tr>
<td>TVS-1000-RP</td>
<td>$281</td>
<td>Replacement velocity/temperature sensor with calibration reference book</td>
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Comes with calibrated sensors, scanner, analysis software, power cord and complete operator’s manual.
Ordering Example: TVS-1008, 8 velocity/temperature sensors, scanner and software, $3928.
More than 100,000 Products Available!

- **Temperature**

- **Flow and Level**
  Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**
  Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**

- **Pressure, Strain and Force**
  Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

- **Heaters**