

# RESEARCH QUALITY WIND TUNNEL



## WT-3200



- ✓ Quick Access Chamber
- ✓ Measure Pressure, Velocity and Temperature Through (6) Sensor Ports
- ✓ Change Flow Rates by Controlling (4) Fans On/Off
- ✓ Operate Vertically or Horizontally
- ✓ Flow Visualization Through the All Plexiglas® Test Section

### Applications

- ✓ Component Temperature Testing: Evaluate the Effects of Air Flow on an Individual or Multiple Component's Temperature and PCB Response and Reliability
- ✓ Heat Sink Characterization: Natural or Forced Convection
- ✓ Sensor Calibration with Calibrated Flow Sensor (Sold Separately)
- ✓ Multiple PCB Testing: Test Actual or Simulated PCBs for Thermal and Flow Distribution\*

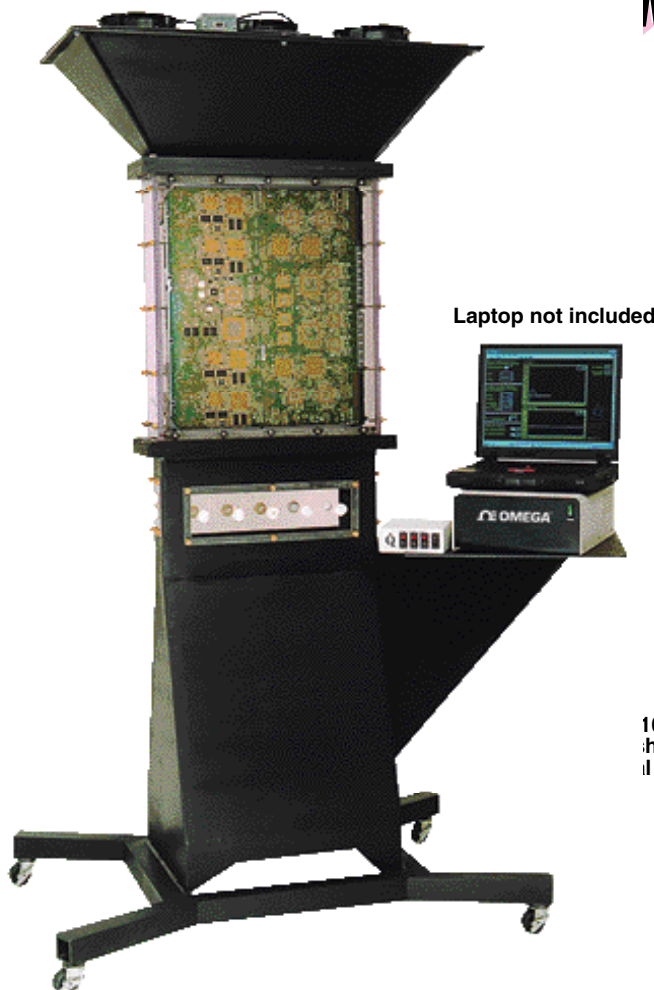
\*Visit [omega.com](http://omega.com) for the TVS-1000 series temperature/velocity profile packages.

The WT-3200 is a unique, fully controllable wind tunnel for thermal and air flow testing of multiple PCBs. The test chamber has a 2-D converging nozzle with a multi-point measurement area for sensor placement upstream of the test section. The test section is equipped with card guides to allow insertion of actual or simulated PCBs from the side panel.

The WT-3200 wind tunnel can be used to characterize different heat sink sizes for natural and forced convection cooling. Two heat sinks can be tested side by side to determine their thermal performance in the same environment. Actual or simulated PCBs can be tested for thermal flow distribution and pressure drop characterization.

The chamber can accommodate up to 6 PCBs with 13 mm (0.5") card-to-card spacing or 3 PCBs with 25 mm (1") card-to-card spacing.

TVS-1008 fan control box, shown smaller than actual size



1008 shown at size.

material to accommodate smoke flow visualization.

The chamber has its own stand for placement of instruments. The WT-3200 is placed on castors for ease of transportation. Rail guides are provided so the unit position can be adjusted. A switch box is provided with the unit so individual fans can be turned on or off.

The WT-3200 can be fitted with different fan trays to accommodate a broad air flow range. Sensors to measure the flow parameters are also available by OMEGA as optional accessories.

### SPECIFICATIONS

**Wind Tunnel:** 214.5 L x 114.3 W x 91.3 cm D (84.4 x 45 x 35.9")

**Test Section:** 60.9 L x 46.9 W x 7.6 cm D (24 x 18.5 x 3")

**Number of Sensor Ports:** 18

**Flow Range:** 0 to 10 m/s (0 to 2000 ft/min)

**Flow Uniformity:**  $\pm 1\%$

**Weight:** 74 kg (164 lb)

**Power Supply Requirements:** 24 Vdc at 4.3 Amps (Power supply provided by customer)

### To Order

Model No.	Description
WT-3200	Research quality wind tunnel

Comes complete with (18) sensor ports, fan control box and operator's manual.

**Ordering Example:** WT-3200, research quality wind tunnel.

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