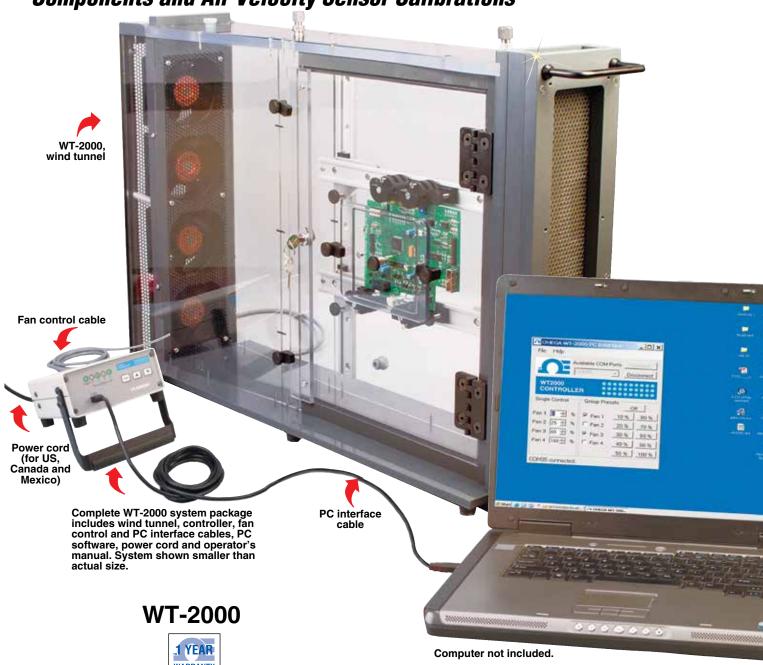
HIGH-PERFORMANCE WIND TUNNEL



For Thermal Evaluation of Circuit Boards, Heat Sinks, Components and Air Velocity Sensor Calibrations



- ✓ Portable Bench-Top Design
- ✓ Provides Highly Accurate, Uniform and Repeatable Air Flow up to 1000 fpm
- Included Control Box Allows for Open Loop Full Scale Operation of Individual Fans, Groups of 2 Fans, or All 4 Fans at a Time
- Free PC Based Open Loop Software Allows User to Precisely Control Air Flow Rate Using the Included USB Cable to Connect to the Control Box
- Large Test Chamber with a Hinged Access Door and Small Access Panel Allows for Fast Comparison Testing on Many Different Size Heat Sinks and Circuit Boards
- ✓ Operates from 90 to 264 Vac Line Power



The thermal wind tunnel from OMEGA is designed to give a highly accurate and uniform flow rate. Four powerful DC fans are precisely controlled to provide variable air speeds from 0 to 1000 ft/min. The WT-2000 wind tunnel was designed to provide thermal characterization of circuit boards, heat sinks and components. The unit is made of clear polycarbonate and PVC for a durable and transparent assembly. The large test section is accessed by the large hinged door and accommodates a removable test plate, as well as a rail system that allows for a wide range of mounting options. In addition, there is a small access door that accommodates the quick changing of smaller components and the placement of sensors. Multiple access ports with 1/4 and 1/2" compression fittings are provided on the top and rear panel of the wind tunnel for the routing of wires and insertion of sensors.

SPECIFICATIONS*

Wind Tunnel

Flow Rate: 0 to 5 m/s (0 to 1000 ft/min)

Size: 80.5 L x 18.4 W x 48.4 cm H (31.7 x 7.3 x 19.1")

Weight: 12.48 kg (27.5 lb)

Test Chamber: 43 x 8.25 cm cross section (17 x 3.25")

Fan Speed: 3800 RPM

DC Fan Motor: 12 Vdc @ 0.47A ea (5.6W ea) x 4

Noise: 61 dBA max, 1 meter away

Electrical Control Box

Power: 90 to 264 Vac @ 47 to 63 Hz

Fuse: 2A fast acting 5 x 20 mm cartridge type **Size:** 16 L x 13.8 W x 6.7 cm H $(6\frac{1}{4} \times 4\frac{7}{16} \times 2^{11}/16^{11})$

Weight: 0.9 kg (2 lb)

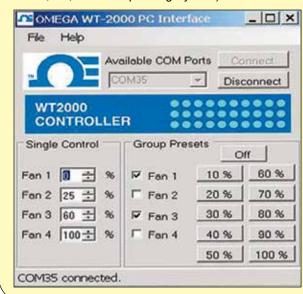
PC Interface: USB

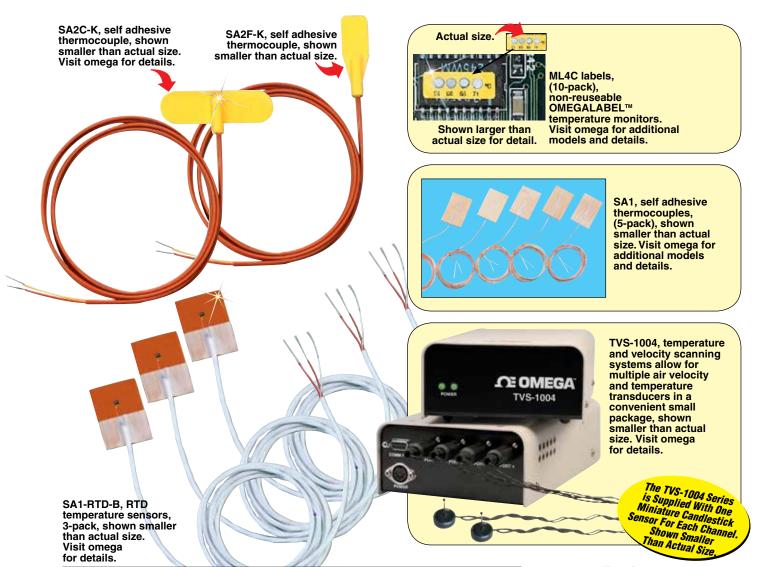
Operating Temperature: 5 to 45°C (41 to 113°F) Operating Relative Humidity: Less than 80%

without condensation

* All specifications measurements at ambient room temperature of 22.2°C (70°F) with less than 80% relative humidity and 760 mm (29.92") of Hg barometric pressure.

Open Loop Velocity Control: Allows for quick and simple modification of individual fan velocity using direct entry or directional arrows. (Requires Windows 2000®, XP, or Vista Operating System)





| To Order | |
|-----------|---------------------|
| Model No. | Description |
| WT-2000 | Wind tunnel package |

Comes complete with fully assembled wind tunnel test chamber, electronic control box controller fan control cable, PC interface cable, molded power cord (for US, Canada, and Mexico), operator's manual, and PC interface software CD.

Ordering Examples: WT-2000 wind tunnel package and SA1-K Type K self adhesive thermocouples with stripped ends (5-pack).

WT-2000 wind tunnel package and HHF42 hot wire anemometer.

Accessories

| Model No. | Description |
|------------------|--|
| TVS-1004 | Velocity and temperature measurement system (4 sensors) |
| HHF1001A | Handheld air velocity/temperature meter |
| FMA-902A-VI | General purpose air velocity transducer, 0 to 1000 SFPM (0 to 5 V output) |
| SA1-K | Type K self adhesive thermocouples with stripped ends (5-pack) |
| SA1-RTD-B | 100Ω self adhesive RTD temperature sensors with stripped ends (3-pack) |
| SA2C-K | Type K, curved surface, molded silicon self adhesive thermocouple |
| SA2F-K | Type K, flat surface, molded silicon self adhesive thermocouple |
| ML4C-143-10 | Non-reversible OMEGALABEL™ temperature monitors with temperature ratings of 143, 149, 154, and 160°C (10-pack) |
| POWER CORD-DM | Power cord (Denmark) |
| POWER CORD-E-10A | Power cord (Continental Europe) |
| POWER CORD- IT | Power cord (Italy and Ireland) |
| POWER CORD-UK | Power cord (United Kingdom) |
| POWER CORD-SE | Power cord for all countries (stripped ends) 250 Vac maximum |