

BWT-100™ Features

· Heat Sink Testing

Characterize a variety of heat sink sizes for natural and forced convection cooling.

• Heat Sink Comparison

Test two heat sinks side by side and compare their thermal performance in the same environment.

Component Testing

Test for component characterization.

PCB Testing

Test actual or simulated PCBs for thermal and flow distribution.

Flow Visualization

Observe flow distribution in the tunnel by smoke or buoyant bubbles through the all Plexiglas™ frame.

Variable Speed

Change flow rate by controlling the fan RPM.

Flow Direction

Test the effect of flow direction by controlling the fan operation.

Quick Access

Quickly change the test specimen through the rear access test board.

Sensor Port

Measure pressure, velocity and temperature through the ports at the entrance and exhaust of the test section.

Data Center

View data and monitor events at the data center

Portable

Truly portable tunnel that occupies little space and produces quality flow.

BWT-100 TM

Benchtop Wind Tunnel



The BWT-100™ is a portable benchtop wind tunnel for thermal characterization of components, boards and heat sinks. The unit is made of Plexiglas™, weighs less than 8 pounds (4 kg) and produces flows up to 400 ft/min (2 m/s). It can be operated horizontally or vertically to adapt to direction-sensitive electronic cooling systems.

The BWT-100TM test section is rear accessed and accommodates a removable test plate for mounting of the test specimens. In another version of the test plate, insulated heat slugs are provided for heat sink characterization tests. Four small DC muffin fans can be individually controlled to generate the flow inside the BWT. The test section is flush-mounted to the base of the tunnel to eliminate any flow disturbances. Instrument ports are provided on the front panel of the unit for placement of temperature, velocity and pressure sensors. Sensors to measure the flow parameters are also supplied as optional accessories. The BWT-100TM can be customized to your specific requirements.

Technical Data

 Length 	22.75" (58cm)
• Depth	3" (7.5cm)
 Width 	10.75" (27cm)
 Weight 	8 lbs. (4 kg)
 Flow range 	0 to 400 ft/min (2 m/s) can be customized
 Wall-to-wall spacing 	1" (2.5 cm)

Test plate 8½" x 10" (21.6 x 25.4cm) Heat slug 1¼" x 1¼" (3½ x 3½ cm)

Heat slug power dissipation Up to 50W

Accessories

Heat-Slug Single Plate	HP-97-1	Single heating element for component/heat sink characterization*
Heat-Slug Dual Plate	HP-97-2	Dual heating element for side-by-side testing of component/heat sink characterization*
Data Center	MCS-1000™	Manual controller for adjusting heaters & fans*
	PCS-1000 TM	Programmable controller for automatic heat sink & component characterization*

*Power supply not included