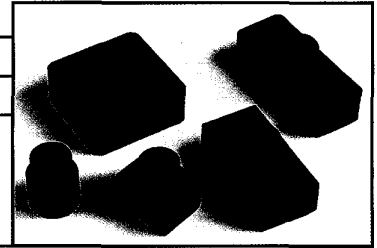
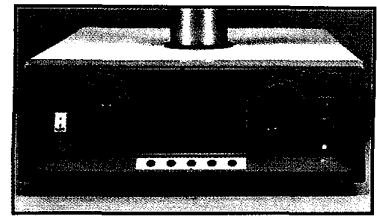


# TP04100A ThermoStream® System Specifications



Temperature Range <sup>1</sup>	-20° to +225°C
Temperature Display and Resolution	0.1°C
Temperature Accuracy	±1°C

## Facilities Preparation

Power Requirements <sup>1</sup>	115V AC ±10%, 50 or 60 Hz, 1 Ø, 15 amp 230V AC ±10%, 50 or 60 Hz, 1 Ø, 10 amp
Compressed Air Supply Pressure <sup>2</sup>	4 to 7 kg /cm <sup>2</sup> (60 to 90 PSIG), 6 kg/cm <sup>2</sup> (80 PSIG) nominal
Supply Airflow at Nominal Supply Pressure <sup>2</sup>	4 to 5 liters/second (8-10 scfm) 4.5 l/s (9 scfm) nominal
Dewpoint <sup>3</sup>	ambient to -40°C
Air Supply Temperature	+20° to +28°C (+22°C nominal <sup>1</sup> )
Operating Temperature (Ambient)	+20° to +28°C (+22°C nominal <sup>1</sup> )
Humidity	0 to 60% (45% nominal <sup>1</sup> )
Noise Level	≤ 70 dBA
Power Connection	Standard male IEC320 power connector socket for attachment of IEC 320 power cord (meets IEC requirements). Power cord (2.4 meters in length) included.

<sup>1</sup>Reduced performance may be encountered at operating conditions less than or greater than nominal.

<sup>2</sup>Requires clean, dry air supply. <sup>3</sup>-40°C dewpoint is nominal for low temperature testing for extended periods.

## Dimensions and Weight

Dimensions:	Controller ..... 40.1 cm (15.8 inches) wide x 14.8 cm (5.8 inches) high x 48.9 cm (19.2 inches) deep
Thermal Wand:	8 cm (3 inches) in diameter x 36 cm (14 inches) long
Stand:	48.25 cm (19 inches) approximately above tabletop to top of post Reach from verticle post: Standard: 51 cm (20 inches)
Weight:	Controller with Thermal Wand and Hose ..... 14.5 kg (32 lbs) Thermal Wand Stand Assembly ..... 7 kg (15.5 lbs) Thermal Cap ..... .45 kg (1 lb)

## Options and Accessories

Thermal Wand Stand Assembly	Expanding, locking stand assembly rotates 340° about the controller cabinet for positioning the Thermal Wand directly over the DUT.
Benchmark Stand Assembly	Attaches the Thermal Wand Stand Assembly directly to a bench. Can be mounted up to 30.5 cm (12 inches) from controller chassis.
Thermal Cap	Transparent single wall glass cap of approximately 9.9 cm (3.9 inches) ID (Internal Diameter); includes metal guard.
Shroud Kit	Shroud attaches to thermal wand for coupling to devices. Kit contains a variety of sizes and shapes (See price list). Available in conductive and non-conductive material.
Insulation Kit	Non-conductive silicone foam rubber sheets. Three sheets: (12" x 12" x .125"), (12" x 12" x .25"), (12" x 12" x .5")
Custom Thermal Test Enclosures and ThermoFixture®	Frost-free thermal enclosures for testing ICs, hybrids, modules and small subassemblies at precise temperature in a moisture-free thermal environment. Available in standard and custom configurations. ThermoFixture includes ATE interface.
ThermoComm™	Temptronic application software for PC interface to the TP04100A controller for remote operation from a Windows® Operating System. Windows 95® or Windows NT® operating system is required. Software is written in LABVIEW®. For access to ThermoComm source code, LABVIEW software (available from National Instruments, Inc.) is required.

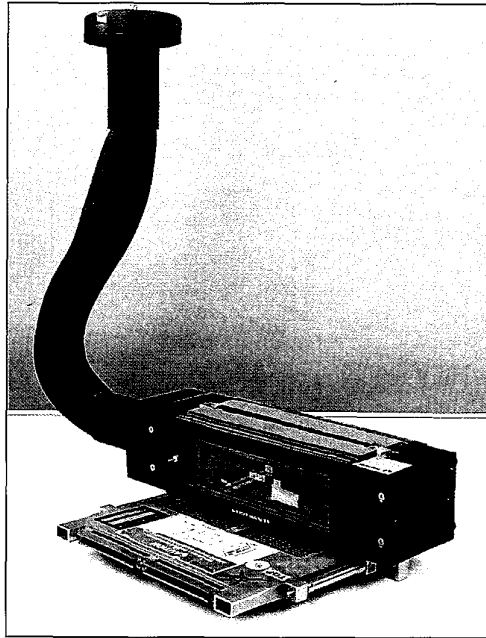
## Options and Accessories

The Thermal Wand may be operated in-hand or secured in the optional **Thermal Wand Stand Assembly** for added stability and hands-free operation. Mounted directly to the TP04100A controller cabinet, the Stand Assembly rotates over 340°, and expands and locks for stable, proper coupling of the Thermal Wand to the DUT. The optional Benchmount Stand Assembly attaches to the bench to hold the Thermal Wand Stand Assembly. The Thermal Wand may then be used while secured in stand for stability during test while located conveniently at the bench.

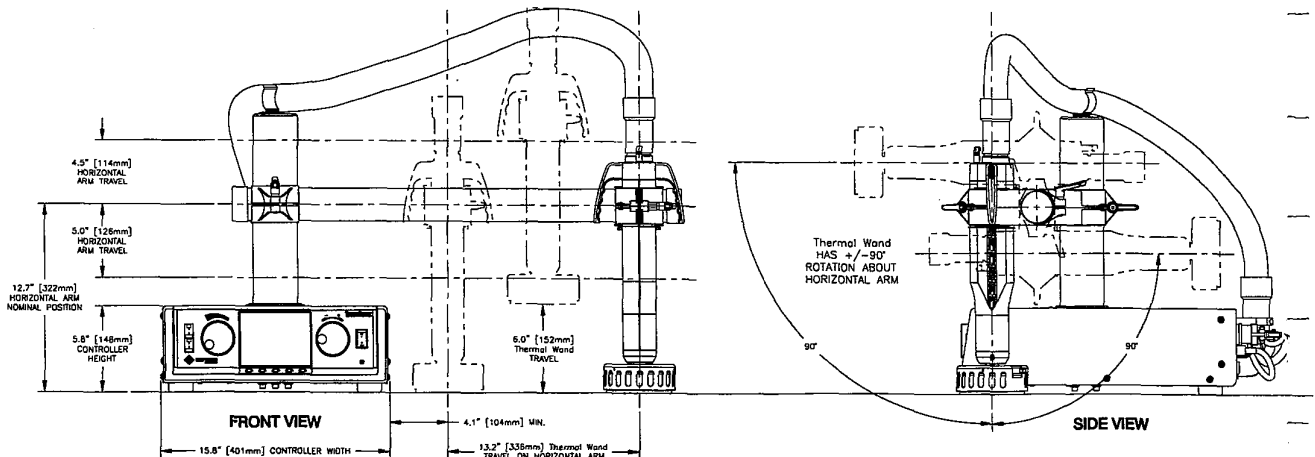
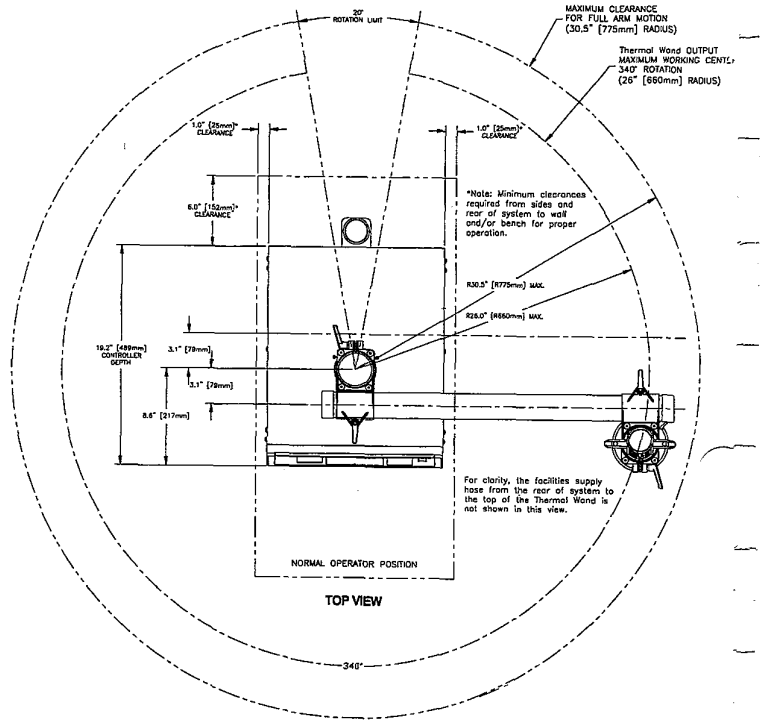
To protect from moisture condensation and frost at the DUT site, the optional single-wall glass **Thermal Cap** may be attached to the Thermal Wand with the shrouds. The Thermal Cap is approximately 9.9 cm (3.9 inches) ID and includes a metal guard. Additional conductive and non-conductive sheets and shrouds in various sizes and shapes are also optional.

For remote operation of the TP04100A from a PC (Windows® operating system), **ThermoComm™** software provides access to all TP04100A operating parameters in a user-friendly format. Using ThermoComm, operators access unlimited temperature test setups, sequences and data logging. (See Specifications for hardware requirements.)

For frost-free thermal testing of ICs, hybrids, modules and small subassemblies in a precisely controlled thermal environment, **ThermoFixture®** and **Custom Thermal Test Enclosures** are available. ThermoFixture enclosures include the complete ATE test interface and DUT thermal control for moisture-free testing at low temperatures even over longer test periods.



Custom Thermal Test Enclosure



**TEMPTRONIC**  
CORPORATION

55 Chapel Street • Newton, MA 02458-1010 USA  
Telephone: (617) 969-2501 • Fax: (617) 969-2475  
<http://www.temptronic.com>

These specifications are valid for the standard product and are subject to change without notice. Applications requiring modification of electrical, thermal or mechanical characteristics should be discussed with the factory for possible accommodation at additional cost. Printed in U.S.A. ThermoStream® an registered trademarks of Temptronic Corporation. Windows®, Windows 95® and Windows NT® are registered trademarks of Microsoft Corporation. ThermoFixture® are registered trademarks of Temptronic Corporation. Part No. SL10260R/A