

# TP04300B

Mobile Temperature System for testing components, parts, hybrids, modules, subassemblies and printed circuit boards at precise temperature.

## TEMPERATURE PERFORMANCE AND AIRFLOW CAPACITY

Temperature Range: <sup>1,3</sup>	-80° to +225°C (60 Hz System) -75° to +225°C (50 Hz System)
Typical Temperature Transition Rate (air) <sup>1,2</sup>	-55° to +125°C: approx. <5 seconds <sup>2</sup> +125° to -55°C: approx. <13 seconds <sup>2</sup>
System air flow output	2.4 l/s to 9 l/s (5 to 18 scfm) CONTINUOUS
Temperature accuracy	1.0°C (when calibrated against NIST transfer standard)
Temperature set, display and resolution	± 0.1°C
<b>Temperature Control:</b>	
DUT Sensor Ports	Internal diode, Type T and Type K Thermocouple and 100 ohm Platinum RTD
DUT Control	Control to within ± 0.1°C; SELF-TUNING available in DUT Control
Remote interface ports	IEEE-488, RS232C Serial, and Start Test/End of Test/Stop on First Fail (ST/ET/SFF) and Ethernet



<sup>1</sup>Note: Ultimate low temperature and system performance may vary under operating conditions less than or greater than nominal.

<sup>2</sup>Note: Transition performed under nominal operating conditions.

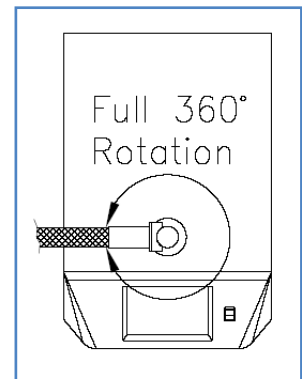
<sup>3</sup>Note: Low temperature extremes may be achieved at reduced airflow rates.

## USER FEATURES

### System Configuration Options (Choice):

- **Modular TP04300B base unit with Turret Assembly and Flexible Extender Air Transfer Hose**  
(Specify choice of Flexible Extender length -up to 6 ft. is included with system. Longer Flexible Extender Hoses are also available- contact factory.)
- **Modular TP04300B base unit with Adapter Kit for connecting aThermoChamber™ Accessory** (ThermoChamber is enclosure sold separately.)

Modes of operation	Two: Operator Mode and Cycling Mode
Test set-up configurations	In Cycling Mode, an unlimited quantity may be created; save to hard disk/diskettes
Ramp/soak/cycle configurations	In Cycling Mode, up to 18 sequences per test set-up; table is displayed on-screen
Program and data storage	Data logging and program files may be stored on the hard drive or to a 3.5" floppy diskette
On-screen help	Included for both Cycling and Operator's Modes
DUT temperature control	Patented <sup>4</sup> Dual Loop Temperature Control
Status indicators	On-screen and remote I/O
Purge flow tester interface protection	Dry air purge protects tester electronics from condensation
Purge flow capacity	0.25 to 1.5 liters per second (0.5 to 3 scfm) airflow, manually adjustable
Calibration	Automated, simplified and accurate for all airflows and DUT types
Range of motion	Turret assembly (connecting Flexible Extender Hose) rotates 360° for full freedom of positioning of Flexible Extender Hose around base unit



Turret Assembly Rotation: 360° of freedom around system base.



Part No. SL10420 R/A

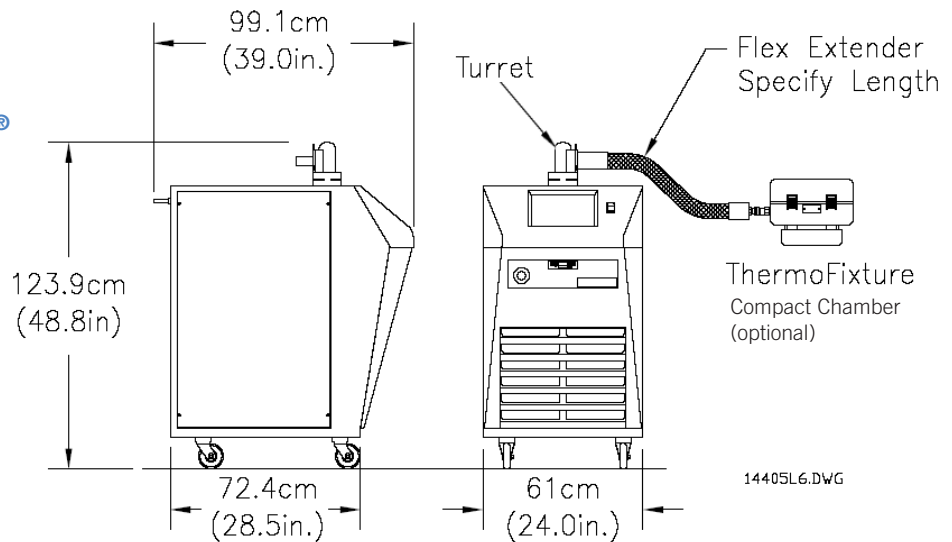


<sup>4</sup>Note: US Patent no. 4,734,872

TP04300B with optional ThermoChamber

Model TP04300B ThermoStream® System Specifications

# Model TP04300B ThermoStream® System Specifications



TP04300B is shown with Turret Assembly connecting Base to Flexible Extender air transfer hose, to ThermoFixture® thermal enclosure. ThermoFixture, also available from Tempronic, is sold separately.

## ENVIRONMENTAL AND SERVICE FEATURES

Over-Temperature Protection	+235°C (factory-set) (Also uses user-settable high and low air temperature limit)
Mobility	4 swivel caster wheels with locks (10.16 cm (4-inch) diameter); rear handle for ease of transport
Refrigerants	HCFC-free and CFC-free, non-toxic, non-flammable
Noise level	<65 dBA approximately
Serviceability	Field-replacement modules and printed circuit boards
<b>Weights and Dimensions</b>	Base: <u>Width:</u> 61.0 cm (24 in.) <u>Depth:</u> 72.4 cm (28.5 in.); <u>Height:</u> 124 cm (49 in.); (height includes Turret Assembly)
(Approximate)	<u>System weight:</u> <u>unpacked:</u> 226 kg (500 lbs) approx.; <u>packed:</u> 341 kg (752 lbs) approx.

(An additional 20.3 cm (8 in.) rear clearance is required for supply connections and cabinet ventilation.)

## FACILITY REQUIREMENTS

<b>Power Requirements<sup>5</sup></b>	200-240 VAC (230V nominal), 50 Hz, 30 amp, 1 phase 200-240 VAC (230V nominal), 60 Hz, 30 amp, 1 phase
<b>Compressed Air Requirements</b>	
Clean, Dry Air	Filtered to 5 micron particulate contamination Oil content: <0.01 ppm by weight filtered to .01 micron oil contaminant Dewpoint: <10°C @ 6.2 BAR (90PSI)
Supply Pressure	6.2 to 7.6 BAR (90 to 110 PSIG)
Supply flow at minimum supply pressure	7.2 l/s to 14.3 l/s (15 to 30 scfm) (Nominal 25 scfm)
Air supply temperature	+20° to +25°C (+22°C nominal)
Operating Temperature	+20° to +28°C (+23°C nominal)
Humidity	0 to 60% (45% nominal)

<sup>5</sup>Note: System is configured for operation within voltages listed above using an internal transformer. Please specify power configuration with order.

\*Under operating conditions which are less or greater than nominal, performance may be less than specification provided.

ISO 9001-2000 Certified



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