

ThermalAir TA-1000B

An Evolution in Localized Temperature Test Systems

The ThermalAir TA-1000B high capacity thermal air stream system is used for temperature testing, fast thermal cycling, and device temperature characterization of components, hybrids, modules, PCBs, and other electronic and non-electronic assemblies at precise temperatures from -25°C to +200°C



Performance Plus!

- Eco-Friendly with up to 50% power energy savings
- Ultra-stable DC temperature control with Smart DC Energy efficient chiller
- Built-in color touch screen display GUI. The front panel touch display easy icons are made for convenient user operation and intuitive user-friendly menus.
- No voltage or frequency configuration needed
 - One system worldwide
- Quiet low audible noise for engineering laboratory
- No LN₂ required [Built-in Chiller]

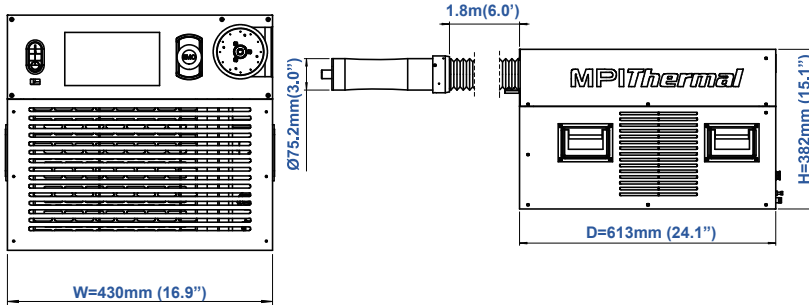
Features and Advantages

- Ultra cold temperatures are maintained at 50Hz or 60Hz.
- The systems touch screen lets operator control temperature settings, ramp and cycle right at user test bench workstation.
- Plug-in anywhere from 185 to 250 VAC. No need for user voltage re-configuration when system moved to different locations.
- USB and SSD for thermal file management and data logging.
- Two User Control Modes - Standard Operator & Temperature Cycle (Temp Cycle, Ramp & Soak)
- User Interface and Operations - Remote Control Compatible Modes for existing user test programs.
 - Center Control Color Touch Screen Display
 - IEEE-488.2 (GPIB), USB, Ethernet, Serial, LXI
 - Intranet via LAN
 - LabVIEW drivers

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***Please note: The system includes Rack Mount Kit and 3.28" Glass Cap. Additional accessories are available.



Full Interface for all communication control requirements



2 USB-Type A, 1 USB-Type B, LAN, RS-232, T-Type, K-Type and RTD temperature sensors PLUS Auto Start Test & End of Test for automatic temperature cycling Hot-Cold-Amb.

All these are made for simple control and serviceability.



- TA-1000B square chassis for 19 inch rack mount requirement with 6 ft. output hose from the front panel.

Specifications

Temperature Performance & Airflow Capacity

Temperature Range	-25°C to +200°C (50/60Hz same system) (*See Note 1)
Typical Temperature Transition Rate	-5°C to +125°C / +125°C to -5°C <10 sec
Temperature Accuracy	± 1.0°C (calibrated system)
Temperature Resolution	± 0.1°C
Temperature Air Output System	4 to 12 SCFM (1.9 l/s to 5.7 l/s) Continuous
Temperature Control Methods	Environmental Internal Air TC and Remote External Type T, K, RTD (TC Sensors)

Note 1 : Systems DO NOT degrade @50Hz or @High Air Flow Output Rates

Note 2 : Ultimate Hot & Cold Temperature (± 1.0°C) achieved at 8 SCFM

Facility Requirements / Dimensions & Weights

Base Unit & System Weight	W=43.0cm (16.9in.), D=61.3cm (24.1in.), H=38.2cm (15.1in.) Un-packed: 64kg (141lbs) / Packed: 162kg (357lbs)	
Portability	4 Lifting Handles	
Front Reach	6ft. Output gas hose from the front panel	
Installation	The system is compatible with rear open type 19 inch Rack Mount.	Rack Mount Kit and 3.28" Cap are included in the system.
Hi-Temp Glass Cap Enclosures	3.28" I.D.	
Noise Level	<52 dBA average	
Power	System operates both at 50Hz & 60Hz 185 - 250VAC (220 Nominal), 60 / 50Hz, 16amp, 1 phase	

Compressed Air

Clean, Dry Air (CDA)	Filtered to 5µ particulate contamination Oil Content: < 0.10 ppm by weight and filtered to 0.01µ oil contaminants
Input Air Dewpoint	<-40°C @6.2BAR (90PSI)
Input Air Pressure	90 to 120 PSIG (6.2 to 8.3 BAR)
Input Air Flow	7 to 15 SCFM (3.3 to 7.0 l/s) 14 SCFM nominal
Input Air Temperature	+15° to +25°C, +22°C nominal
Operating Temperature Environment	+15° to +28°C, +23°C nominal
Operating Humidity	0 to 60% RH, 45% nominal