

ThermalAir TA-1000A

An Evolution in Localized Temperature Test Systems

The ThermalAir TA-1000A 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 temperature from -25°C to +200°C.



More Options

- Air Dryer
- Easy Roll Around Cart



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 makes 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.
- A separate temperature controlled dry air purge for keep surrounding test area frost free operation during long test times at extreme cold temperatures.
- 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

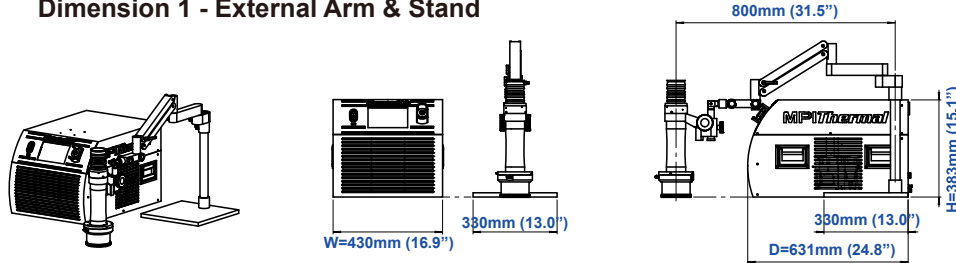
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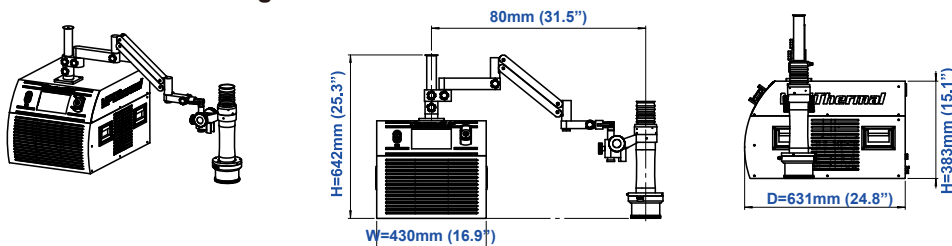
***Please note: The system includes Integrated Arm & Stand, Microscope Style External Stand and 3.28" Glass Cap. Additional accessories are available.

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MPI Thermal ThermalAir TA-1000A INFO Sheet

Dimension 1 - External Arm & Stand



Dimension 2 - Integrated Arm & Stand



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 this makes for simple control and service ability.

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=63.1cm(24.8in.), H=38.3cm(15.1in.) Un-packed : 64kg (141 lbs) / Packed : 156 kg (344 lbs)
Portability	4 Lifting Handles
Maximum Reach	80.0 cm (31.5 in.) with 6 ft. output gas hose
Arm & Stand Installation	Two ways: External (On the table) / Integrated (On the unit)
Hi-Temp Glass Cap Enclosures	3.28" I.D. } Stands and 3.28" Cap are included in the system
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	Contaminants -40°C dewpoint or dryer@90PSI (6.2 BAR)
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