ATS-770-M THERMOSTREAM®

DATASHEET AND SPECIFICATIONS

-100° to +225°C

Advanced Temperature Source for fast and precise thermal conditioning of components, parts, hybrids, modules, subassemblies, and printed circuit boards. Capable of ultra-low temperatures **without** the use of Liquid Nitrogen (LN_2) or Liquid Carbon Dioxide (LCO_2).

PERFORMANCE:

Temperature Range*
-95 to +225°C (50Hz)
-100 to +225°C (60Hz)
No LN_2 or LCO_2 Required

Transition Rate*
-55 to +125°C, approx. 12 seconds or less
125 to -55°C, approx. 12 seconds or less
*under nominal operating conditions

System Airflow Output*
4 to 12scfm (1.9 to 5.6 l/s) Continuous
* under nominal conditions
ultimate low temperature achieved at 8scfm

FEATURES:

▶ **Frost Free Feature**
dry air purge for tester interface, prevents condensation: 0.5 to 3scfm (0.25 to 1.5 l/s)

▶ **ECO Friendly Features**
Automatic Power Reduction
reduces power usage during idle periods
Heat Only Mode
reduces power usage when cold temperatures are not used

▶ **Heated Defrost Feature**
quickly removes moisture buildup from internal chiller
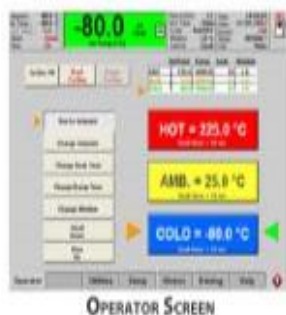
▶ **Fully Adjustable Thermal Head**

TEMPERATURE CONTROL:

Temperature Display & Resolution
+/- 0.1°C

Temperature Accuracy
1.0°C (when calibrated against NIST standard)

DUT Temperature Control
proprietary control algorithm enables
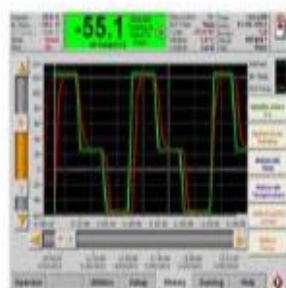DUT temperature to be directly controlled

DUT Sensor Ports
internal diode, thermocouples (T & K),
RTD (100 Ohm platinum)

▶ Windows' OS

▶ Local & Remote Operations

▶ LabView™ & LabWindows' drivers

▶ On-Screen Help

▶ Ethernet, IEEE-488, RS232 ports

▶ USB, keyboard, mouse, & printer ports

▶ customizable and savable test setups

▶ Program & Datalog Storage
(via ethernet or USB)

▶ User Defined Temperature Limits

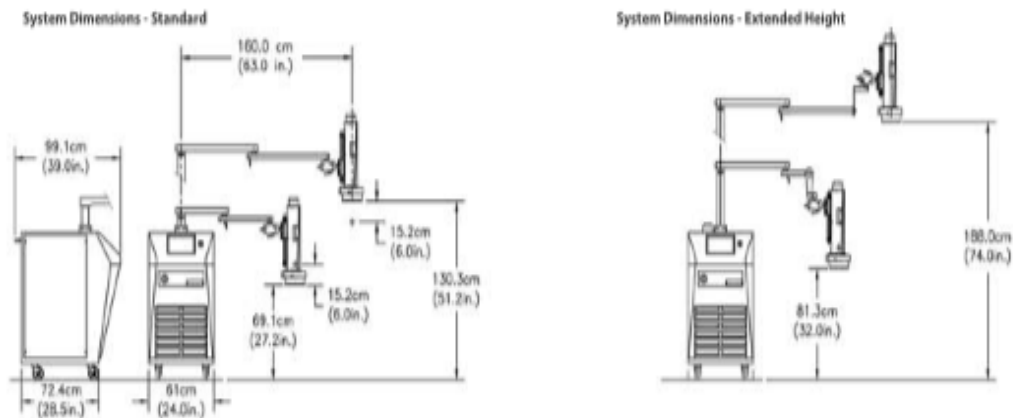## APPLICATION OPTIONS:

▶ **Thermal Cap or FlexExtender Hose**
4.5 or 5.5 inch ID Thermal Cap or optional
FlexExtender Hose for connection to
external Thermal Chambers or enclosures

▶ **MobileTemp™ Thermal Chambers**
Temperature Chambers designed specifically
for uses with ATS THERMOSTREAM® Systems.
See Additional Datasheets for details.

OPERATOR SCREEN

DATALOG SCREEN

inTEST Thermal Solutions
TEMPTRONIC
CORPORATION

Specifications

ATS-770-M THERMOSTREAM®
Advanced Temperature Source

System Dimensions - Standard

99.1cm (39.0in.)
160.0 cm (63.0 in.)
15.2cm (6.0in.)
15.2cm (6.0in.)
130.3cm (51.2in.)
69.1cm (27.2in.)
72.4cm (28.5in.)
61cm (24.0in.)

System Dimensions - Extended Height

188.0cm (74.0in.)
81.3cm (32.0in.)

Weights and Dimensions

Base [1]	Width: 61.0 cm (24 in.), Depth: 72.4 cm (28.5 in.)
	Height: 108 cm (42.5 in.)
System Weight	Not packed: 236 kg (520 lbs.)
	Packed: 365 kg (805 lbs.)
Mobility	Four static dissipative, swivel caster wheels
Maximum Reach	160.0cm (63 in.)
Maximum Operating Height	130.3 cm (51.2 in.) - extended height option: 188.0 (74.0 in.)
Minimum Operating Height	69.1 cm (27.2 in.) - extended height option: 81.3 (32.0 in.)
Noise Level	<65dBA

[1] an additional 20.3 cm (8 in.) clearance is required for supply connections and cabinet ventilation

Service and Safety

Refrigerants	HCFC and CFC-free, non-toxic, non-flammable
Serviceability	Auto-diagnostics and field replaceable modules
Over Temperature Protection	+230°C (factory set): Operator can set high and low air temperature limits

Facility Requirements

Power [2]	200 - 250 VAC (230V nominal), 50/60Hz
	30 amp, 1 phase
Compressed Air [3]	
Clean, Dry Air (CDA)	Filtered to 5 micron particulate contamination.
	Oil Content: <0.1 ppm, by weight, filtered to
	0.01 micron oil contaminant.
	Dewpoint: <10°C @ 6.2 BAR (90PSI)
Air Supply Pressure	6.2 to 7.6 BAR (90 to 110 PSIG)
Total Air Flow Rate Required	7.1 to 14.2 l/s (15-30 scfm)
	11.8 l/s (25 scfm) nominal
Air Supply Temperature	+20° to +25°C; +22°C nominal
Operating Environment [3]	
Operating Temperature	+20° to +28°C; +23°C nominal
Humidity	0 to 60%; 45% nominal

[2] System is configured for operation within voltages listed above using an internal transformer. Please specify power configuration with order
[3] Under operating conditions which are greater or less than nominal, performance may be less than specification provided

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ISO 9001 Certified

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