

ATS-730-T THERMOSTREAM®

DATASHEET AND SPECIFICATIONS

-90° 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 (LN₂) or Liquid Carbon Dioxide (LCO₂).

PERFORMANCE:

Temperature Range*

-85 to +225°C (50Hz)

-90 to +225°C (60Hz)

No LN₂ or LCO₂ Required

Transition Rate*

-55 to +125°C, approx. 10 seconds or less

125 to -55°C, approx. 10 seconds or less

System Airflow Output*

4 to 18scfm (1.9 to 8.5 l/s) Continuous

* under nominal operating conditions
ultimate low temperatures (±1°) achieved at 18scfm

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)

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

▶ 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:

▶ FlexExtender Hose

FlexExtender Hose for connection to external Thermal Chambers or enclosures. 2', 4', or 6' length standard, custom lengths available.

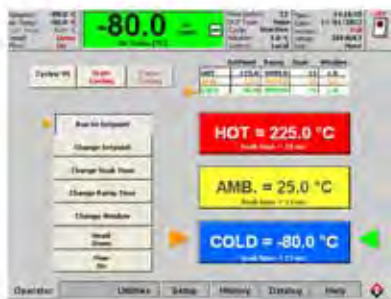
note: FlexExtender length affects performance

▶ MobileTemp™ Thermal Chambers

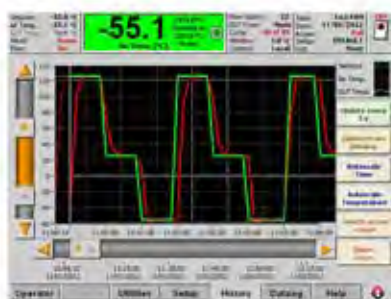
Temperature Chambers designed specifically for uses with ATS THERMOSTREAM® Systems. See Additional Datasheets for details.



System shown with optional enclosure

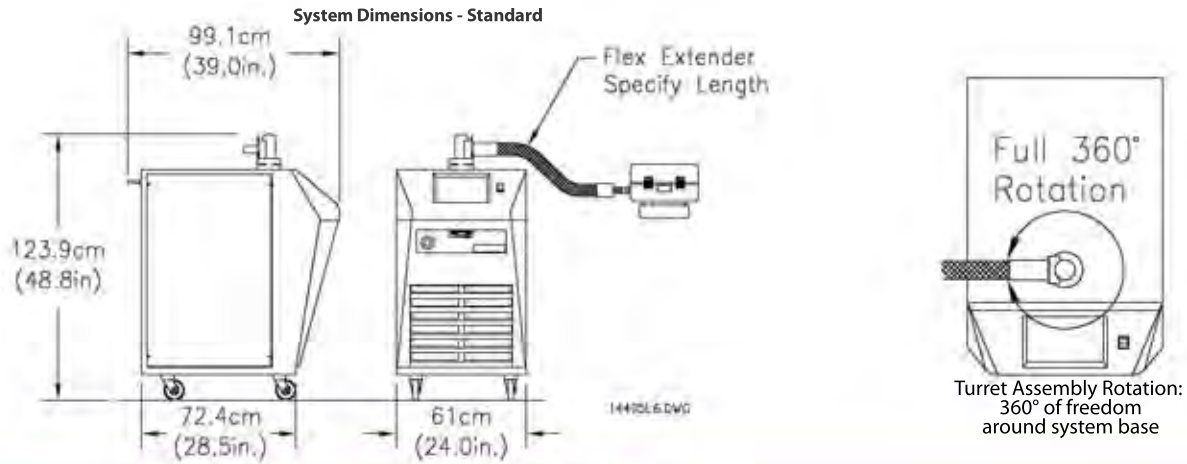


OPERATOR SCREEN



DATALOG SCREEN





Weights and Dimensions

Base¹	Width: 61.0 cm (24 in.), Depth: 72.4 cm (28.5 in.) Height: 123.9 cm (48.8 in.)
System Weight	Not packed: 226 kg (500 lbs.) Packed: 341 kg (762 lbs.)
Mobility	Four static dissipative, swivel caster wheels
FlexExtender Length	FlexExtender hose available in 1', 2', and 4' standard lengths custom lengths available
Noise Level	<65dBA

¹ an additional 20.3cm (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

Power²	200 - 250 VAC (230V nominal), 50/60Hz 30 amp, 1 phase
Compressed Air²	
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 Environment²	
Operating Temperature	+20° to +28°C; +23°C nominal
Humidity	0 to 60%; 45% nominal



inTEST Thermal Solutions
41 Hampden Road
Mansfield, MA 02048
TEL: 1.781.688.2300
www.inTESTthermal.com

ISO 9001 Certified



² Systems configured for operation within voltages listed above using inTEST thermal transformers. Please specify power configuration with order.
Under operating conditions which are greater or less than nominal, performance may be less than specifications provided.