# ATS-525 THERMOSTREAM®

**DATASHEET AND SPECIFICATIONS**

![Image of ATS-525 THERMOSTREAM®](image)

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**
-60 to +225°C (50/60Hz)
No LN$_2$ or LCO$_2$ Required

**Transition Rate**
-40 to +125°C, <12 seconds
+125 to -40°C, <40 seconds

**System Airflow Output**
5scfm (2.4 l/s) Fixed Flow Rate
*Under nominal operating conditions.

## 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 Feature**
  Heat Only Mode
  reduces power usage when cold temperatures are not used

- **Fully Adjustable Thermal Head**

- **Local & Remote Operations**

- **LabView™ drivers**

- **IEEE-488, RS232 ports**

- **customizable and savable test setups**

- **Program & Datalog Storage**

- **User Defined Temperature Limits**

## APPLICATION OPTIONS:
- **Thermal Cap**
  5.5 inch ID Glass Thermal Cap to enclose your test subject

- **High Performance Air Dryer**
  (optional) a 20scfm air dryer for drying supply air to <-70°C dewpoint, refer to air dryer data sheet (SL10690) for technical specifications

- **System Cart**
  (optional) a castered, heavy-duty, steel cart for portability and easy mounting of thermal head and operator control module

- **Benchmount**
  (optional) conveniently clamps the thermal head to a benchtop or workstation

## 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**
thermocouples: type T & K

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# Specifications

## ATS-525 THERMOSTREAM®

Advanced Temperature Source

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### Weights and Dimensions

**Dimensions**

- **Controller:** 26.7cm (10.5 inches) wide X 20.7cm (8.13 inches) high X 9.8cm (3.8 inches) deep
- **Chiller:** 51.3cm (20.2 inches) wide X 41.4cm (16.3 inches) high X 74.9cm (29.5 inches) deep

**Weight**

- **System:** 112.0kg (247lbs.)
- **Chiller:** 74.5kg (157lbs.)
- **Chiller with Cart:** 100.8kg (215lbs.)

**Noise Level**

<60dBA

### 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**

- 115 ±10% VAC, 60Hz, 20amp (15amp available)
- 100 ±10% VAC, 50Hz, 20amp (15amp available)
- 200 ±10% VAC, 50Hz, 16amp
- 220 ±10% VAC, 60Hz, 16amp
- 230 ±10% VAC, 50Hz, 16amp

**Compressed Air**

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: <-70°C @ 6.2 BAR (90PSI)

- 5.5 to 7.6 BAR (90 to 110 PSIG)
- 5.7 l/s (12 scfm) minimum
- 2.8 l/s (6scfm) minimum
- +20° to +25°C; +22°C nominal

- +20° to +28°C; +23°C nominal

**Humidity**

0 to 60%; 45% nominal

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1 System is configured for operation within voltages listed above. Please specify power configuration with order.

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

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System Dimensions - with optional cart

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ISO 9001 Certified

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