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 ($\text{LN}_2$) or Liquid Carbon Dioxide ($\text{LCO}_2$).

**PERFORMANCE:**
- **Temperature Range**
  - $-75$ to $+225^\circ\text{C}$ (50Hz)
  - $-80$ to $+225^\circ\text{C}$ (60Hz)
- **Transition Rate**
  - $-55$ to $+125^\circ\text{C}$, approx. 10 seconds or less
  - $125$ to $-55^\circ\text{C}$, 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 ($\pm1^\circ\text{C}$) achieved at 12scfm

**TEMPERATURE CONTROL:**
- **Temperature Display & Resolution** $\pm0.1^\circ\text{C}$
- **Temperature Accuracy** $1.0^\circ\text{C}$ (when calibrated against NIST standard)
- **DUT Temperature Control**
  - proprietary control algorithm enables DUT temperature to be directly controlled

**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**
- **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.
**Specifications**

**ATS-710-M THERMOSTREAM®**

**Advanced Temperature Source**

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### Weights and Dimensions

**Base**
- 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**
- 160.0 cm (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

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### 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

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### Power

- 200 - 250 VAC (230V nominal), 50/60Hz 30 amp, 1phase

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### 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: <10°C @ 6.2 BAR (90PSI)
- 6.2 to 7.6 BAR (90 to 110 PSIG)
- 7.1 to 14.2 l/s (15-30 scfm)
- 11.8 l/s (25 scfm) nominal
- +20° to +25°C; +22°C nominal
- +20° to +28°C; +23°C nominal
- 0 to 60%; 45% nominal

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**Facility Requirements**

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**Base Diameter**
- 160.0 cm (63 in.)
- 130.3 cm (51.2 in.) - extended height option: 188.0 (74.0 in.)
- 69.1 cm (27.2 in.) - extended height option: 81.3 (32.0 in.)

**Temperature**
- 0 to 60°C; 45°C nominal

**Humidity**
- 0 to 60%; 45% nominal

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**System is configured for operation within voltages listed above using an internal transformer. Please specify power configuration with order.**

**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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**inTEST Thermal Solutions**

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part number SL10720A

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