Designed for **60Hz operation only**, this Advanced Temperature Source is 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$_2$).

**FEATURES:**
- **Frost Free Feature**
  dry air purge for tester interface, prevents condensation: 0.5 to 3 scfm (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**

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

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

**PERFORMANCE:**
- **Temperature Range**
  -45 to +225°C
  No LN$_2$ or LCO$_2$ Required
- **Transition Rate**
  -40 to +125°C, <12 seconds
  +125 to -40°C, <40 seconds
- **System Airflow Output**
  4 to 10 scfm (1.9 to 4.7 l/s) Continuous
  *Under nominal operating conditions. Transition rates achieved with 20amp system, 10 scfm

**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

**TEMPERATURE RANGE:**
-45° to +225°C

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**LOCAL & REMOTE OPERATIONS:**
- LabView™ drivers
- IEEE-488, RS232 ports
- customizable and savable test setups
- Program & Datalog Storage
- User Defined Temperature Limits

**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

**DESIGNED FOR 60Hz operation only**
Specifications

ATS-615 THERMOSTREAM®
Advanced Temperature Source

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
60Hz only, system does not operate at 50Hz
115 ±10% VAC, 60Hz, 20amp (15amp available)
220 ±10% VAC, 60Hz, 20amp

Compressed Air
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)

Clean, Dry Air (CDA)

Air Supply Pressure
5.5 to 7.6 BAR (90 to 110 PSIG)

Total Air Flow Rate Required
5.7 l/s (12 scfm)
2.8 l/s (6scfm) minimum

Air Supply Temperature
+20° to +25°C; +22°C nominal

Operating Environment

Operating Temperature
+20° to +28°C; +23°C nominal

Humidity
0 to 60%; 45% nominal

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.

ATS-615 THERMOSTREAM®
Advanced Temperature Source

Specifications

System Dimensions - with optional cart

Controller:

Chiller:

Chiller with Cart:

<60dBA

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