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*
  -75 to +225°C (50Hz)
  -80 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 18 scfm (1.9 to 8.5 l/s) Continuous
  * under nominal operating conditions
  ultimate low temperatures (±1°) achieved at 12 scfm

**TECHNICAL SPECIFICATIONS:**

**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

**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),

**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.

ISO 9001 Certified
www.inTESTthermal.com
part number: SL.10830A
Speciﬁcations

ATS-545-M THERMOSTREAM®
Advanced Temperature Source

Weights and Dimensions

| Base¹ | Width: 61.0 cm (24 in.), Depth: 72.4 cm (28.5 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 |

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-diagnoses 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, 1phase |
Compressed Air³ | 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 (90PSIG) |
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 |
| | +20° to +25°C; +22°C nominal |
Air Supply Temperature | Operating Environment³ |
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