



ATS-605 THERMOSTREAM®

-20° to +225°C

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 (LN₂) or Liquid Carbon Dioxide (LCO₂).

PERFORMANCE:

Temperature Range*

-20 to +225°C

No LN₂ or LCO₂ Required

System Airflow Output*

4 to 10 scfm (1.9 to 4.7 l/s) Continuous

*Under nominal operating conditions
-20°C temperature achieved at 4scfm

TEMPERATURE CONTROL:

Temperature Display & Resolution

+/- 0.1°C

Temperature Accuracy

1.0°C (when calibrated against NIST standard)

DUT Temperature Control

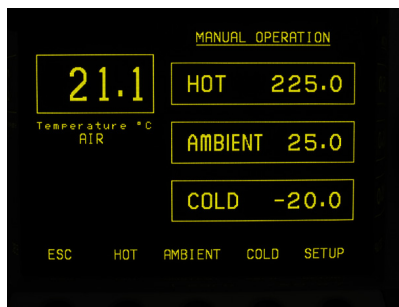
Proprietary control algorithm enables DUT temperature to be directly controlled

DUT Sensor Ports

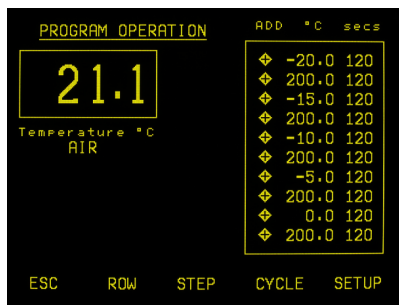
Thermocouples (type T & K)



ATS-605 SHOWN WITH
OPTIONAL THERMAL STAND



OPERATOR SCREEN



PROGRAM SCREEN

FEATURES:

- Customizable & savable test setups
- Program & Datalog Storage
- User Defined Temperature Limits
- Local & Remote Operations
- LabView™ drivers
- IEEE-488, RS232 ports

SYSTEM OPTIONS:

Benchmount Stand Assembly

Attaches the Thermal Wand Stand Assembly directly to a bench top. Can be mounted up to 30.5cm (12 inches) from controller chassis.

Pneumatic Wand Lift Assembly

Automates the raising and lowering of the Thermal Wand for the loading and unloading of the DUT.

Thermal Stand Assembly

Expanding, locking, stand assembly for added stability and hands-free operation of the Thermal Wand. Rotates 340° around the controller cabinet for positioning the wand directly over the DUT.

APPLICATION OPTIONS:

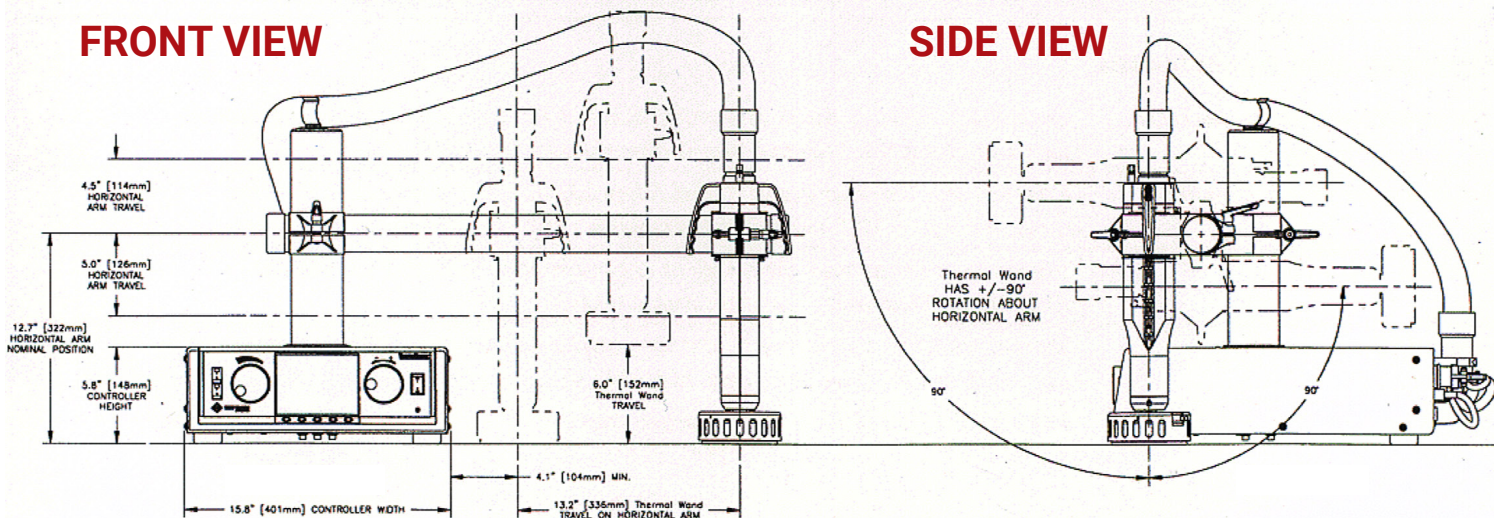
Thermal Cap

3.9 or 5.5 inch ID Thermal Cap



FRONT VIEW

SIDE VIEW



FACILITY REQUIREMENTS

Power ¹	60Hz only, system does not operate at 50Hz 115 ±10% VAC, 60 Hz 15 amp, 1phase 230 ±10% VAC, 60 Hz 10 amp, 1phase
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: ambient to -40°C
Air Supply Pressure	5.6 to 7kg /cm2 (80 to 90 PSIG), 5.6 kg/cm (90 PSIG) nominal
Total Air Flow Rate Required	4.0 to 6.2 l/s (8-13 scfm), 4.5 l/s (9 scfm) nominal
Air Supply Temperature	+20° to +28°C; +23°C nominal
OPERATING ENVIRONMENT³	
Operating Temperature	+20° to +28°C; +23°C nominal
Humidity	0 to 60%; 45% nominal

WEIGHTS & DIMENSIONS

Dimensions	Controller: 40.1cm (15.8 inches) WIDE 14.8cm (5.8 inches) HIGH 48.9cm (19.2 inches) DEEP Thermal Wand: 8cm (3 inches) DIAMETER 36cm (14 inches) LONG Stand: 48.25cm (19 inches) approximately above benchtop to top of post Reach from Vertical Post: standard, 51cm (20 inches)
Weight	Controller with Thermal Wand and Hose: 14.5 kg (32lbs.) Thermal Wand Stand Assembly: 7kg (5.5 lbs.) Thermal Cap: .45 kg (1lb.)
Noise Level	<70dBA

SERVICE & 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

¹Reduced performance at operating conditions less than or greater than nominal
²-40°C dewpoint is nominal for low temperature testing for extended periods
³Under operating conditions which are greater or less than nominal, performance may be less than specification provided

