



## 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 (LN<sub>2</sub>) or Liquid Carbon Dioxide (LCO<sub>2</sub>).

### PERFORMANCE:

#### Temperature Range\*

-20 to +225°C

No LN<sub>2</sub> or LCO<sub>2</sub> 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

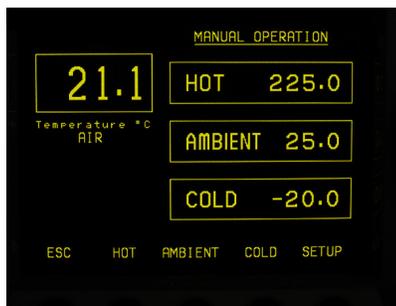
Proprietary control algorithm enables DUT temperature to be directly controlled

#### 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.

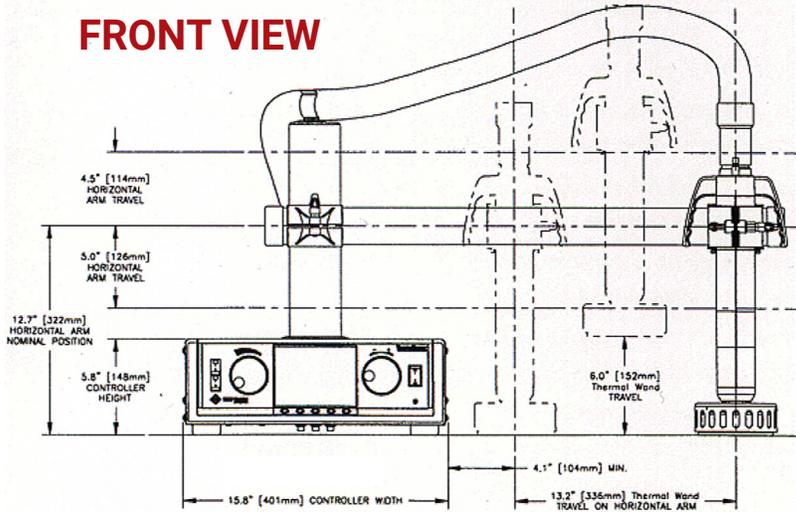
### APPLICATION OPTIONS:

#### Thermal Cap

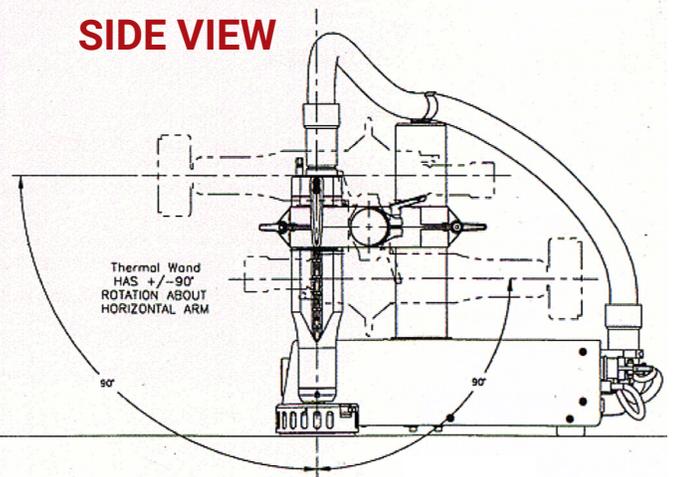
3.9 or 5.5 inch ID Thermal Cap



## FRONT VIEW



## SIDE VIEW



## FACILITY REQUIREMENTS

Power <sup>1</sup>	<b>60Hz only, system does not operate at 50Hz</b> 115 ±10% VAC, 60 Hz 15 amp, 1phase 230 ±10% VAC, 60 Hz 10 amp, 1phase
<b>COMPRESSED AIR<sup>2</sup></b>	
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 /cm <sup>2</sup> (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
<b>OPERATING ENVIRONMENT<sup>3</sup></b>	
Operating Temperature	+20° to +28°C; +23°C nominal
Humidity	0 to 60%; 45% nominal

## WEIGHTS & DIMENSIONS

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

<sup>1</sup>Reduced performance at operating conditions less than or greater than nominal

<sup>2</sup>-40°C dewpoint is nominal for low temperature testing for extended periods

<sup>3</sup>Under operating conditions which are greater or less than nominal, performance may be less than specification provided

