

# ATS-505 THERMOSTREAM®

DATASHEET AND SPECIFICATIONS

**-20° to +225°C**



ATS-505 SHOWN WITH  
OPTIONAL THERMAL STAND

Advanced Temperature Source for fast and precise thermal conditioning of components, parts, hybrids, modules, subassemblies, and printed circuit boards. Capable of 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 (50/60Hz)

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

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

### 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)



OPERATOR SCREEN

### FEATURES:

- ▶ customizable and 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.



PROGRAM SCREEN

### APPLICATION OPTIONS:

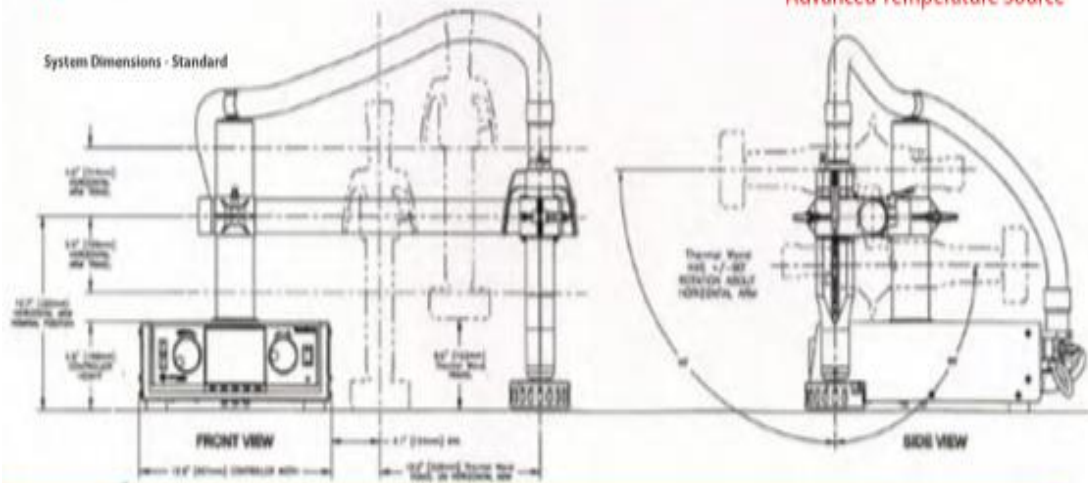
#### ▶ Thermal Cap

3.9 or 5.5 inch ID Thermal Cap



# Specifications

## ATS-505 THERMOSTREAM<sup>®</sup> Advanced Temperature Source



### Weights and Dimensions

<b>Dimensions</b>	<b>Controller:</b> 40.1cm (15.8 inches) WIDE x 14.8cm (5.8 inches) HIGH x 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)
<b>Weight</b>	Controller with Thermal Wand and Hose: 14.5 kg (32lbs.) Thermal Wand Stand Assembly: 7kg (5.5 lbs.) Thermal Cap: .45 kg (1lb.)
<b>Noise Level</b>	<70dBA

### Service and Safety

<b>Refrigerants</b>	HCFC and CFC-free, non-toxic, non-flammable
<b>Serviceability</b>	Auto-diagnostics and field replaceable modules
<b>Over Temperature Protection</b>	+230°C (factory set); Operator can set high and low air temperature limits

### Facility Requirements

<b>Power<sup>1</sup></b>	200 - 250 VAC (230V nominal), 50/60Hz 10 amp, 1phase
<b>Compressed Air<sup>1</sup></b>	
<b>Clean, Dry Air (CDA)</b>	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
<b>Air Supply Pressure</b>	5.6 to 7kg /cm <sup>2</sup> (80 to 90 PSIG)
<b>Total Air Flow Rate Required</b>	5.6 kg/cm (90 PSIG) nominal 4 to 5 l/s (8-10 scfm) 4.5 l/s (9 scfm) nominal
<b>Air Supply Temperature</b>	+20° to +28°C; +23°C nominal
<b>Operating Environment<sup>2</sup></b>	
<b>Operating Temperature</b>	+20° to +28°C; +23°C nominal
<b>Humidity</b>	0 to 60%; 45% nominal



广东宏展科技有限公司  
[www.labcompanion.cn](http://www.labcompanion.cn)  
 Tel: 400-628-2786  
 Email: [info@labcompanion.cn](mailto:info@labcompanion.cn)

ISO 9001 Certified



<sup>1</sup> Fielded performance at operating conditions less than or greater than nominal. <sup>2</sup> 4K design is nominal for low temperature testing for extended periods.  
<sup>3</sup> In the event of conditions which are greater or less than nominal, performance may be less than specifications provided.