

# ATS-605 THERMOSTREAM®

DATASHEET AND SPECIFICATIONS

**-20° to +225°C**



ATS-605 SHOWN WITH  
OPTIONAL THERMAL STAND

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)

## FEATURES:

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



OPERATOR SCREEN

## 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

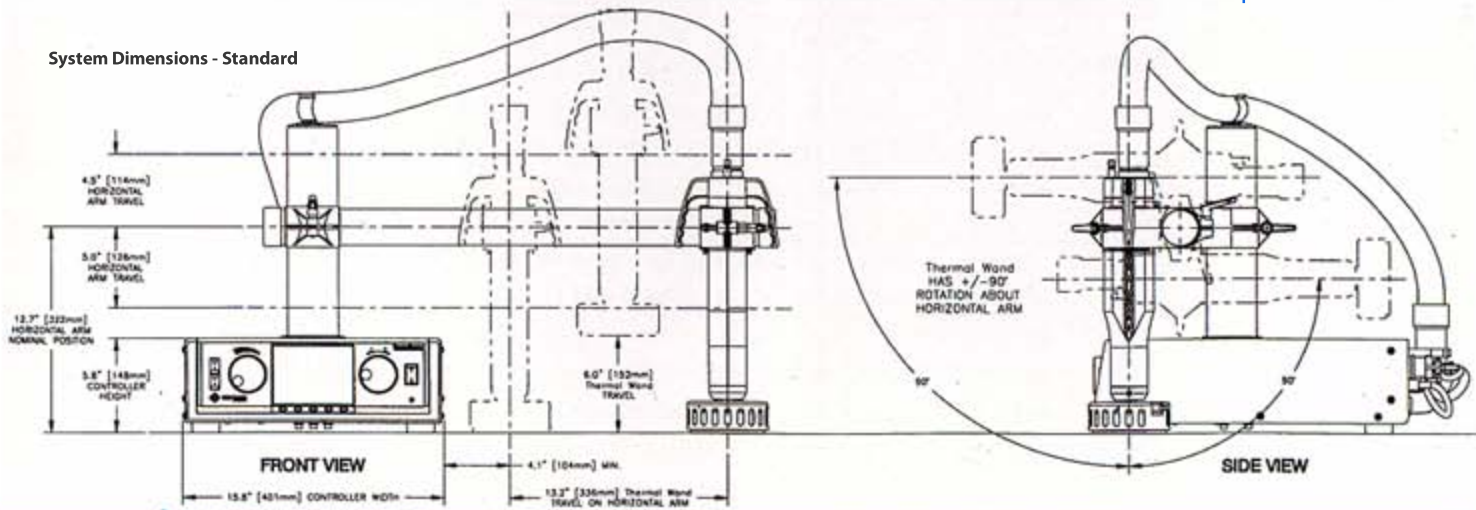
## APPLICATION OPTIONS:

### ▶ Thermal Cap

3.9 or 5.5 inch ID Thermal Cap



## System Dimensions - Standard



## Weights and Dimensions

### Dimensions

**Controller:** 40.1cm (15.8 inches) WIDE x 14.8cm (5.8 inches) HIGH x 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 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<sup>1</sup>

**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 Air<sup>3</sup>

#### 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 to 5 l/s (8-10 scfm)

4.5 l/s (9 scfm) nominal

#### Air Supply Temperature

+20° to +28°C; +23°C nominal

#### Operating Environment<sup>2</sup>

#### Operating Temperature

+20° to +28°C; +23°C nominal

#### Humidity

0 to 60%; 45% nominal

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

<sup>2</sup> -40C 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



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