

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 (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)

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.



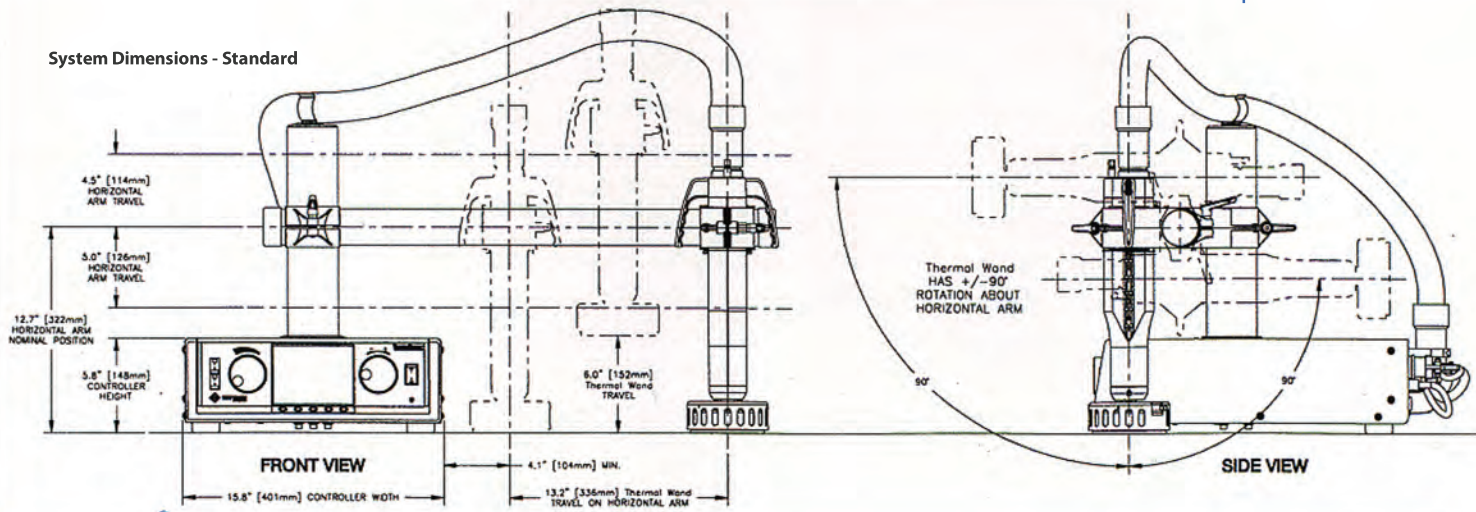
PROGRAM SCREEN

APPLICATION OPTIONS:

▶ Thermal Cap

3.9 or 5.5 inch ID Thermal Cap





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

Power¹

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 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: 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 Environment²

Operating Temperature

+20° to +28°C; +23°C nominal

Humidity

0 to 60%; 45% nominal

¹ Reduced performance at operating conditions less than or greater than nominal

² -40C dewpoint is nominal for low temperature testing for extended periods

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



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ISO 9001 Certified

