

# ATS-635 THERMOSTREAM®

# -60° to +225°C

Designed for **60Hz operation**, this Advanced Temperature Source is for fast and precise thermal conditioning of components, parts, hybrids, modules, subassemblies, and printed circuit boards. Capable of ultralow temperatures **without** the use of Liquid Nitrogen  $(LN_2)$ , Liquid Carbon Dioxide  $(LCO_2)$ , or compressed air.

# **PERFORMANCE:**

#### Temperature Range\*

-60 to +225°C No  $LN_2$  or  $LCO_2$  Required

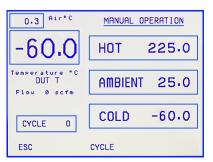
#### **Transition Rate\***

- -40 to +125°C, <12 seconds
- +125 to -40°C, <40 seconds

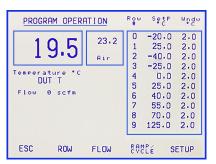
#### System Airflow Output\*

5scfm (2.4 l/s) Fixed Flow Rate

\*Under nominal operating conditions.



#### **OPERATOR SCREEN**



**PROGRAM SCREEN** 

# **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:**

#### **Frost Free Feature**

Dry air purge for tester interface, prevents condensation: 0.5 to 3scfm (0.25 to 1.5 l/s) Fully Adjustable Thermal Head

ATS

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

# **APPLICATION OPTIONS:**

## Thermal Cap

5.5 inch ID Glass Thermal Cap to enclose your test subject

### High Performance Air Dryer

*(optional)* A 20scfm air dryer for drying supply air to <-70°C dewpoint, refer to air dryer data sheet (SL10690) for technical specifications

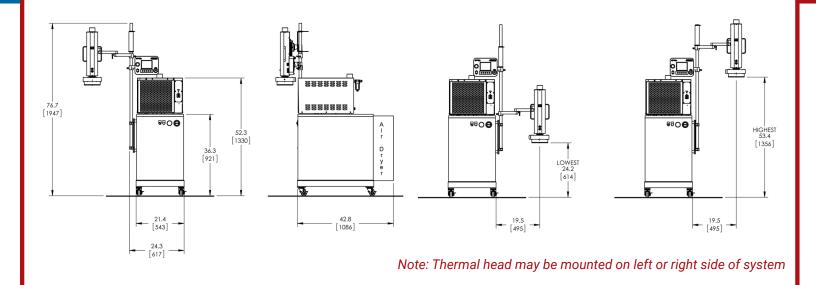
#### System Cart

an inTEST Company

nTEST Thermal Solutions

*(optional)* A castered, heavy-duty, steel cart for portability and easy mounting of thermal head and operator control module





|                                    | FACILITY REQUIREMENTS   |  |  |
|------------------------------------|---|--|--|
| Power <sup>1</sup>                 | <b>Chiller:</b> 220 ±10% VAC, 60Hz, 16amp<br><b>Compressor:</b> 220 ±10% VAC, 60Hz, 30amp |  |  |
| OPERATING ENVIRONMENT <sup>2</sup> |   |  |  |
| Operating Temperature              | +20° to +28°C; +23°C nominal  |  |  |
| Humidity                           | 0 to 60%; 45% nominal   |  |  |

|   |             | WEIGHTS & DIMENSIONS   |  |
|---|-------------|--|--|
| - | Dimensions  | Controller: 10.5 inches (26.7 cm) wide<br>8.1 inches (20.6 cm) high<br>3.8 inches (9.7 cm) deep<br>Chiller: 20.2 inches (51.3 cm) wide<br>16.3 inches (41.4 cm) high<br>29.5 inches (74.9 cm) deep |  |
|   | Weight      | <b>System (with external Compressor):</b> 550 lb (249.5 kg)<br><b>Chiller:</b> 157 lb (71.2 kg)<br><b>Chiller with Cart:</b> 215 lb (97.5 kg)  |  |
|   | Noise Level | <60dBA   |  |

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

<sup>1</sup>System is configured for operation within voltages listed above. Please specify power configuration with order. <sup>2</sup>Under operating conditions which are greater or less than nominal, performance may be less than specification provided

