

# S-Series Bench Top Temperature/Humidity Test Chambers



## THERMOTRON®

### Proven Performance for Standard Test Requirements

S-Series Chambers provide superior performance over a wide range of applications. Chamber design and construction meet critical standards. Engineering expertise assures optimum temperature change rates. Years of design experience provide long term performance and reliability. S-Series Chambers offer the flexibility, uniformity and control accuracy required for cost effective testing for all types of products.

### Instrumentation Combines Versatility with Convenience

Thermotron's 2800 Programmer/Controller combines sophisticated performance with easy to read displays and simplified operation. It is standard instrumentation on every S-Series Chamber. The 2800 features 256 programmable intervals and 4 auxiliary outputs for expanded versatility.

Thermotron's exclusive Therm-Alarm™ is an advanced alarm and limit device that protects the chamber and products being tested from temperature extremes. This optional instrumentation provides audible, visual and relay contact indication if preset temperature levels are exceeded.

### Accountability and Dedication

Thermotron prides itself on providing benchmark-quality application, sales and service support. Our direct approach to handling business before and after the sale strengthens our dedicated commitment to solve problems and stand behind our equipment.

- Maximum temperature range, from -68°C to +177°C (-90°F to +350°F)
- Humidity range from 20% RH to 98% RH
- Professional user/maintenance manual
- Two standard models: 3.5 cubic feet and 5.5 cubic feet
- Sophisticated, easy-to-use Model 2800 Programmer/Controller
- Therm-Alarm™ temperature alarm/limit
- Easy set-up
- Short and long term rental plans
- Lease-to-own options

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# S-Series Bench Top Temperature/Humidity Test Chambers

MODEL	SM-3.5S	SM-5.5C
Temperature Range	-18°C to +110°C (0°F to +230°F)	-68°C to +177°C (-90°F to +350°F)
Humidity Range*	20% to 98%	20% to 98%
Cooling Change Rate +25°C to -18°C (+77°F to 0°F)	60 minutes	8 minutes
+25°C to -40°C (+77°F to -40°F)	--	16 minutes
+25°C to -54°C (+77°F to -65°F)	--	24 minutes
Heating Change Rate +25°C to +65°C (+77°F to +150°F)	15 minutes	--
+25°C to +110°C (+77°F to +230°F)	60 minutes	13 minutes
+25°C to +177°C (+77°F to +350°F)	--	30 minutes
Temperature Control Tolerance	+/-1.1°C	+/-1.1°C
Live Loads +10°C (+50°F)	250 Watts	--
-18°C (0°F)	--	750 Watts
-40°C (-40°F)	--	500 Watts
Humidity Control Tolerance**	+/-2.5% RH	+/-2.5% RH
Window Inches (cm)	12x12 (30x30)	12x12 (30x30)
Volume Cubic Ft (Liters)	3.5 (99)	5.5 (155)
Weight Pounds (Kg)	300 (136)	700 (318)
Workspace Dimension Inches	W x D X H 17x18x20	W x D X H 20x20x24
Cm	43x46x51	51x51x61
Move-in Dimension Inches	49x29x31	56x32x38
Cm	124x74x79	142x84x95
Electrical Service (full load amps)		
115/1/60	16	--
230/1/60	8	25
230/3/60	--	20
220/1/50	8	28
400/3/50	--	17
Compressor Size	1/4 HP	(2) 1 HP

\* Limited by a +7°C (+45°F) minimum dew point and a maximum dry bulb of +85°C (+185°F).

\* SM-3.5S is limited by +15°C (+59°F) minimum dew point.

\*\* At a dry bulb temperature above +20°C (+68°F).

Performance is based upon operation at 60 Hz and 23.9°C (75°F) ambient air, and may vary slightly at other ambient temperatures. Chambers are designed for use under normal laboratory conditions. For other applications, please consult Thermotron.

## Chamber Options

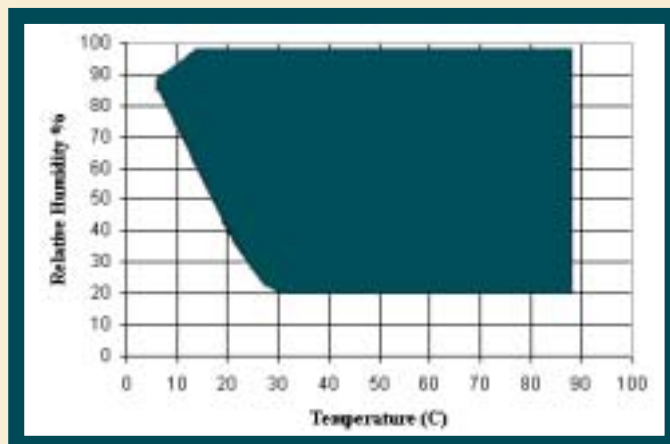
- Cart
- Glove ports
- Access ports with plugs (additional or standard)
- Electrical door interlock (S5.5 only)
- Additional shelving
- CO2 injection system
- LN2 purge
- GN2 purge
- Refrigeration gauges
- Water demineralizer
- Recirculating system
- Other voltages available

## Programmer/Controller Options

- Multi-option board including:
  - Digital printer output
  - Real time clock
  - Analog output for recording
- Relay output board with 4 relays
- IEEE-488 or RS-232 computer interface

## Instrumentation Options

- Therm-Alarm™
  - Chart recorders
  - System Monitor
  - Digital printer
- Specifications subject to change.
- The addition of accessories may impact performance.
- Certain options may increase move-in dimensions. Contact Thermotron if dimensions are critical.
- Special order options are available, please check with Thermotron.



Standard Performance