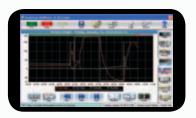


# Advanced Test Equipment Rentals - www.atecorp.com 800-404-ATEC (2832)









# THERMOTRON®

# S/SM-8200 Series Environmental Test Chambers

# Ideal for Environmental Testing

Thermotron's S/SM-8200 Series chambers deliver the quality and accuracy you would expect from a premier worldwide supplier of environmental testing equipment. Featuring the 8200 touchscreen programmer/controller, wide temperature and humidity ranges, and multiple chamber sizes, Thermotron's S/SM-8200 Series chamber is the ideal choice for quality and customizable simulated environmental testing.



### Powerful, Yet Versatile Chambers

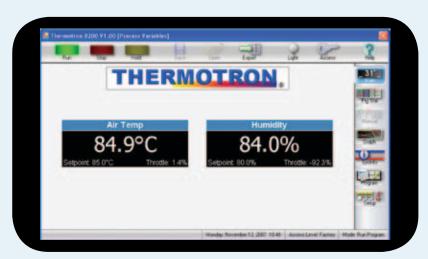
S/SM-8200 Series chambers utilize hermetically sealed compressors that provide moderate temperature change rates while consuming less power than comparable chambers. A heated window provides a clear view of the test area that is illuminated by the interior work space light. Casters provide mobility and easy move-in capabilities. Advanced features such as an electronic humidity sensor and product temperature control add value and reduce test time and maintenance.

We understand that protecting your investment is important; that's why a comprehensive service and support program is available for each S/SM-8200 Series chamber sold. Thermotron's warranty backs every chamber sold with access to application engineers, technical support, and nationwide field service technicians, lowering the ongoing cost of ownership.

#### 8200 Touchscreen Controller

Thermotron's S/SM-8200 Series chambers feature the 8200 programmer/controller. Operation and data collection are easy with its high-resolution 7-inch color touchscreen display. The familiar Windows® look and feel supports robust operations. Its unique main screen allows most of the information and interface to be contained on a single screen, eliminating confusing navigation. The graphing screen uses a tap and drag zoom box, allowing you to magnify specific areas on a graph easily.

The built-in USB port allows programs to be interchanged between instruments quickly and

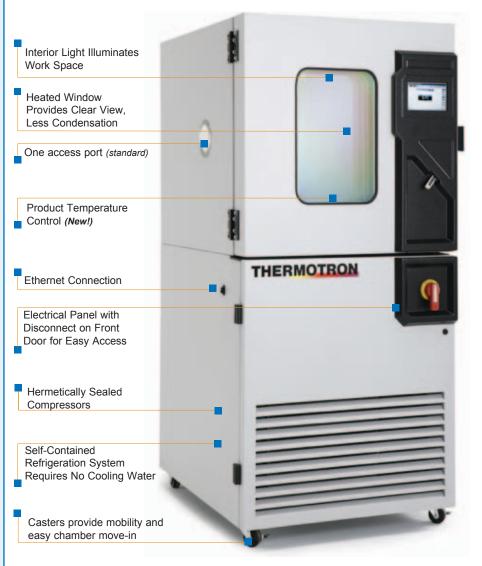


The 8200 features pinpoint accuracy with touchscreen simplicity.

easily, as well as allowing the export and transfer of test data using a USB flash drive. With built-in Ethernet capabilities, the 8200 has network-wide accessibility. All of these benefits add up to a powerful series of environmental test chambers that meet the requirements of your test.

# S-8200 Series

#### Standard Features and Benefits





Door-Mounted 8200 Programmer Controller Frees Access Space

USB Port



User-Friendly Pop-Up Keypad for quick and easy data entry



Graphing Capability

#### S/SM-8200

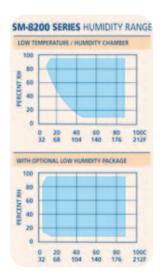
## **Chamber Options**

- · Add'l Access Ports and shelving
- Auxiliary Event Relay Board
- Cable Notch
- · CE and CSA Compliant
- Chart Recorders
- Dry Air or Nitrogen Purge System
- GPIB or RS-232/485
   Computer Interface
- Humidity Water Purification and Recirculation System
- · Inner Glass Doors
- Low Humidity System

- Liquid Nitrogen or CO<sub>2</sub> Boost/ Back-Up Cooling System
- Refrigeration Gauges
- ThermAlarm™
- ThermoTrak II™ Software
- Water-cooling

\*Specifications subject to change. The addition of accessories may affect performance. Certain options may increase move-in dimensions.

Model	S-4-8200	S-8-8200	S-16-8200	S-27-8200	S-32-8200			
Interior Dimensions —WxDxH Inches Centimeters	20x20x20 51x51x51	24x24X24 61x61x61	30x30x30 76x76x76	36x36x36 91x91x91	38x38x38 97x97x97			
Cubic Volume — Ft/Liters	4/113	8/227	16/453	27/764	32/906			
Exterior Dimensions — WxDxH Inches Centimeters	31x42x68 79x107x173	35x49x73 89x124x185	45x59x81 114x150x206	51x65x88 130x165x224	53x68x90 135x173x229			
Temperature Range	-70°C to +180°C (-94°F to +356°F)							
Temperature Control Tolerance	All Models 0.3°C (0.5°F)							
Temperature Uniformity	All Models 0.7°C (1.1°F)							
Weight — Lbs/Kg	700/318	800/363	1,320/599	1,800/816	1,975/896			
Compressor Size	1-1	1-1	2-2	2-2	2-2	2-3		
Cooling Change Rates — Min +180°C to -65°C (+356°F to -85°F) +71°C to -65°C (+160°F to -85°F) +85°C to -40°C (+185°F to -40°F)	50 30 14	66 44 26	68 50 28	85 58 39	93 65 45	68 48 21		
Heating Change Rates — Min -65°C to +180°C (-85°F to +356°F) -65°C to +71°C (-85°F to +160°F) -40°C to +85°C (-40°F to +185°F)	27 11 10	42 16 15	52 22 20	66 27 25	71 30 28	38 12 10		
Live Load Capacity — Watts -18°C (0°F) -40°C (-40°F) -54°C (-65°F)	600 400 300	550 350 200	1,000 700 400	1,000 700 400	1,000 700 400	1,500 1,050 600		
Electrical Service — Amps 230/1/60 230/3/60 460/3/60 220/1/50 400/3/50	(full load) 27 21 — 25 12	(full load) 25 19 — 24 11	(full load) 46 33 — — 17	(full load) 46 33 — — — 17	(full load) 46 33 — — — 17	(full load) — 47 24 — 24		
Noise Level <sup>†</sup> — dBA Heating/Cooling	60/68	60/68	60/70	60/70	60/70	60/70		



### THERMOTRON

291 Kollen Park Drive Holland, Michigan, USA 49423 Marketing: (616) 393-4580 Main: (616) 392-1491 Fax: (616) 392-5643 E-mail: info@thermotron.com

Thermotron Industries, U.K. Newton House Winch Road Kent Science Park Sittingbourne, Kent ME9 8EF England Phone: 01795 436333 Fax: 01795 436777 Email: sales@thermotron.co.uk

www.thermotron.com

SM-8200 SERIES TEMPERATURE/HUMIDITY CHAMBER SPECIFICATIONS

Model	SM-8-8200	SM-16-8200	SM-27-8200	SM-32-8200					
Interior Dimensions —WxDxH Inches Centimeters	24x24x24 61x61x61	30x30x30 76x76x76	36x36x36 91x91x91	38x38x38 97x97x97					
Cubic Volume — Ft/Liters	8 / 227	16 / 453	27 / 764	27 / 764 32/906					
Exterior Dimensions — WxDxH Inches Centimeters	35x49x73 89x124x185	45x59x81 114x150x206	51x65x88 130x165x224	53x68x90 135x173x229					
Temperature Range	-68°C to +180°C (-90°F to +356°F)								
Temperature Control Tolerance	All Models 0.3°C (0.5°F)								
Temperature Uniformity	All Models 0.7°C (1.1°F)								
Weight — Lbs/Kg	875/397	1,395/633	1,875/851	2,050/930					
Humidity Range *	All Models 10% to 98% RH								
Humidity Control Tolerance **	All Models 2.5% RH								
Humidity Uniformity ***	All Models 1% RH								
Compressor Size	1-1	2-2	2-2	2-2	2-3				
Cooling Change Rates — Min +180° to -65°C (+356°F to -85°F) +71°C to -65°C (+160°F to -85°F) +85°C to -40°C (+185°F to -40°F)	72 54 32	80 54 31	98 64 42	106 71 48	74 51 23				
Heating Change Rates — Min -65°C to +180°C (-85°F to +356°F) -65°C to +71°C (-85°F to +160°F) -40°C to +85°C (-40°F to +185°F)	43 17 16	54 22 21	68 28 26	73 31 29	40 13 11				
Live Load Capacity — Watts -18°C (0°F) -40°C (-40°F) -54°C (-65°F)	550 350 200	1,000 700 400	1,000 700 400	1,000 700 400	1,500 1,050 600				
Electrical Service — Amps 230/1/60 230/3/60 460/3/60 220/1/50 400/3/50	(full load) 25 19 — 27 11	(full load) 46 33 — 21	(full load) 46 33 — 21	(full load) 46 33 — 21	(full load) — 53 27 — 24				
Noise Level <sup>†</sup> — dBA Heating/Cooling	60/68	60/70	60/70	60/70	60/70				

<sup>\*</sup> Limited by a +7°C (+45°F) minimum dew point temperature and a maximum dry bulb temperature of+88°C (+190°F). Relative humidity indication at or near the physical limits may be affected by sensor accuracy and control tolerance
\*\*At a dry bulb temperature above +20°C (+68 °F).
\*\*\*Based upon temperature uniformity specifications.

<sup>†</sup> Noise Level: A-weighted sound pressure level measured at a distance of 1.0 meter (39.4

<sup>†</sup> Noise Levei: A-weighted sound pressure level measured at a distance of 1.0 meter (39.4 inches) from the surface of the equipment at a height of 1.6 meters (63 inches) from the floor in free-field conditions, using a calibrated instrument.
Performance is based upon 60Hz and 23.9°C (75°F) ambient air, and may vary slightly at other ambient temperatures. Chambers are designed for use under normal laboratory operating conditions. For other applications, please consult Thermotron.