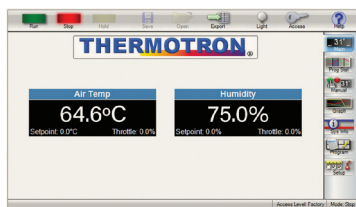# S/SM-8200+ BENCHTOP ENVIRONMENTAL CHAMBER

Benchtop Environmental Test Chambers provide superior performance for a wide range of applications. Engineering expertise assures optimum performance while chamber construction meets critical standards. Benchtop chambers offer the flexibility, reliability, uniformity, and control accuracy required for cost effective testing in a convenient tabletop size in temperature-only and temperature-humidity configurations. The chambers are also equipped with Thermotron's exclusive Windows®-based 8200+ Controller, which gives users a deeper look at what is happening to the product under test.

Features

- 8200+ Controller
- 0.9 to 1.5 cubic feet (25-42 liters)
- Access Port with Plug
- Cascade Refrigeration System
- Ethernet Connection
- Electronic Humidity Sensor (*SM models only*)
- Full Range Humidity System (*SM models only*)

SM-1.0-8200

8200+ Controller

The enhanced 8200+ Controller features an intuitive touchscreen display, with quick and efficient performance. Users can securely and easily enter and monitor test data with a familiar Windows®-based interface.

Built-in Graphing Capabilities
users pinpoint the exact data they wish to see

Ethernet Connection
easy and secure data export and remote PC access

Password-Based Security
multi-level, system protects sensitive data

Quick Step Wizards
easy program entry, test setup, and product monitoring
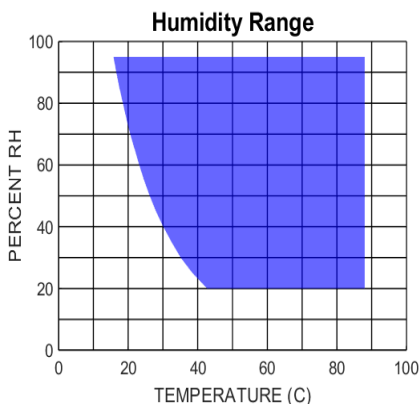
Transferable Spreadsheet Data
test data can be exported to commonly used spreadsheet formats and transferred via USB

Web Server
view the controller status from any computer connected to the network

Humidity Range

Temperature-Humidity Benchtop Chambers are ideal for testing products exposed to humidity extremes in their normal use environment. The electronic humidity sensor (located in the workspace) eliminates the need for maintenance-intensive thermocouple wicks and float tanks, and it provides excellent full-range humidity accuracy.

Humidity Range

Optional Features

- Additional Access Ports
- Cart
- Cable Notch
- Custom Finishes
- CSA or CE Electrical Code

- Dry Air or GN$_2$ Purge System
- Four Monitor Channels
- Product Temperature Control (PTC) Software
- RS-232-485 or GPIB Interface Connection

- Recorder*
- Refrigeration Gauges*
- Shelves
- ThermAlarm®
- Window

* Not available on SM-1.0

	S-1.0-8200	SM-1.0-8200	S-1.2-8200	S-1.5-8200
Temperature Range^	-40°C to 130°C (-40°F to 266°F)		-73°C to 180°C (-100°F to 356°F)	
Workspace Dimensions — WxDxH — in / cm	14 x 8 x 14 / 36 x 20 x 36		16 x 11 x 12 / 41 x 28 x 30	20 x 11 x 12 / 51 x 28 x 30
Exterior Dimensions — WxDxH — in / cm	18 x 23 x 30 / 46 x 58 x 76		30 x 22 x 41 / 76 x 56 x 104	34 x 22 x 41 / 86 x 56 x 104
Controller Screen Size — Inches	5			
Volume — Cubic Feet / Liters	0.89 / 25		1.2 / 34	1.5 / 42
Shipping Weight (approx.) — Pounds / Kg	235 / 106	250 / 113	320 / 145	400 / 181
Cooling Performance[1]^ — Minutes 25°C to -35°C (77°F to -31°F) 25°C to -40°C (77°F to -40°F) 25°C to -54°C (77°F to -65°F)	42 - -		18 20 30	22 24 36
Heating Performance[1] — Minutes 25°C to 110°C (77°F to 230°F) 25°C to 130°C (77°F to 266°F) 25°C to 180°C (77°F to 356°F)	16 26 -		18 26 45	22 31 54
Live Load Capacity — Watts, Temp. Mode +10°C (50°F) -18°C (0°F) -40°C (-40°F) -54°C (-65°F)	300 125 - -		- 350 250 200	- 250 175 150
Humidity Range[2]	-	20% to 95%RH (±2.5%)	-	-
Window Size — WxH — in / cm	optional		6 x 8 / 15 x 20	
Electrical Service — Full Load Amps 115 / 1 / 60 220 / 1 / 50	13.8* 9.5		16 11	
Compressor Size	(1) 1/3 HP		(2) 1/3 HP	

[1] Average

[2] Limited by 15°C (59°F) minimum dewpoint and max dry bulb of 88°C (190°F). RH tolerance is specified at a dry bulb temperature above 20°C (68°F)

^Cooling performance is based on standard refrigerants. Low-GWP refrigerants are available with reduced cooling rates. Single-stage systems are generaly limited to -35°C (-31°F) with non-standard refrigerants.

*20 Amp minimum service/20 Amp plug on a 6 ft cord.

Temperature Control Tolerance is ±1.1°C (2°F)

The addition of accessories may impact performance or increase exterior dimensions.

Performance is based upon 60 Hz and 23.9°C (75°F) ambient air. Chambers are designed for normal, non-hazardous laboratory operating conditions. If hazardous materials are involved, please consult the factory.

Specifications subject to change without notice.

Exterior color options

Chamber Blue™

Lab Gray™

Custom Colors Available

THERMOTRON