

MODEL 2000SPA-SC

HIGH ACCURACY HUMIDITY GENERATOR



SPECIFICATIONS

Accuracy over RH Operating Range @ 23°C	±0.6%RH ¹
Accuracy over RH Operating Range (10°C to 40°C)	±0.8%RH
Accuracy over RH Operating Temperature (10-50°C)	±1.0%RH ²
Temperature Accuracy @ 23°C	±0.10°C
Humidity Range @ 23°C	<7%RH to 92%RH
Temperature, High	50°C
Temperature, Low	Typically 10°C below ambient
Chamber Humidity Stability @ 23°C	±0.2%RH
Chamber Temperature Stability @ 23°C	±0.1°C
Chamber Humidity Uniformity @ 23°C	±0.2%RH @ 50%
Chamber Temperature Uniformity @ 23°C	±0.1°C @ 50%RH
Chamber Size	2 Liters (approx.)
Response Time After Temp Stability @ 23°C	<5-7 minutes (typical over range)
Transfer Standard Calibration	NVLAP Accredited ISO 17025

PHYSICAL CHARACTERISTICS

Weight	14kg
Controller Type	PID
Controller Resolution	0.1%RH, 0.1°C
Power Requirements	110/220 VAC, 50/60 Cycle

CALIBRATION INSTRUMENTATION INFORMATION

System Performance Verification RH ³	NVLAP Calibrated Transfer Standard
Uncertainty of Transfer Standard	NVLAP Calibrated 0.3%RH, 0.036°C
Accuracy of NVLAP Calibration System ⁴	0.3%RH and 0.036°C, TS9500
Chamber Probe Temp Compensated	-40 to 60°C for Full Range Accuracy
Calibration Certification of Trans. Std. ⁵	NVLAP Accredited Laboratory

¹ Based on calibration, adjustment and comparison of system values against NVLAP calibrated transfer standard

² Accuracy is based on readings of system when compared to readings of calibrated transfer standard. Calibration of the transfer standard is performed by Thunder Scientific using the Model 9500 high accuracy system. The Model 9500 has a specified Uncertainty of 0.30%RH and 0.036°C. The transfer standard is adjusted to read the same as the Model 9500 system. In order to assure linearity the transfer standard is adjusted at 10%, 35%, 50%, 80% and 95%RH @ 23C. A Certificate of Conformance for the Transfer standard is provided by Thunder Scientific Laboratory.

³ System is verified with a final comparison check of the controller set point values and transfer standard chamber readings at 10, 35, 50, 80 and 95%RH @23°C. Readings must be within ±0.3%RH and ±0.1°C. A Certificate of Conformance with "As Left" comparison values between system readings and transfer standard readings is provided by Kaymont.

⁴ Accuracy of NVLAP system used for the calibration of transfer standard.

⁵ NVLAP Accredited Certificate of Calibration for transfer standard.

Note: Software is not included with this system. Consult factory if required.

The M2000SPA-SC is completely portable with no special preparation required for field use or on-site, in plant maintenance.