

# Model 2500 CM

## Humidity Generator/Calibrator



### Special Features

- Rapid humidity and temperature settling time for highly accurate calibration
- Optional integrated chilled mirror
- Automatic Ramp/Soak
- Supports on-site, multi-point calibration of humidity probes
- Factory Calibration Transfer Standard included and optional ISO17025 Accredited calibration available (Additional Fees Apply)

GENERAL SPECIFICATIONS				
CALIBRATION TO (17025 TRACEABLE TO NIST)	TRANSFER STANDARD	No Charge		
	CERTIFICATE	17025 Validation (Additional Fees Apply)		
OPERATING AMBIENT CONDITIONS	TEMPERATURE	18 °C to 28 °C		
	HUMIDITY	Up to 80 % RH		
STORAGE CONDITIONS	TEMPERATURE	-20 °C to 50 °C		
	HUMIDITY	0 % to 95 % RH (non-condensing)		
ALTITUDE	2000 m			
CONTROLLES RANGE	TEMPERATURE	5°C to 55°C		
	HUMIDITY@18°C	5% to 95 % RH	HUMIDITY@35°C	5 % to 80 % RH
	HUMIDITY@23°C	5% to 95 % RH	HUMIDITY@40°C	5 % to 75 % RH
	HUMIDITY@30°C	5% to 85 % RH	HUMIDITY@50°C	5 % to 60 % RH
CALIBRATION SYSTEM ACCURACY	TEMPERATURE	± 0.10 °C Or Better	Typically ± 0.05 °C	*Based on Probe Accuracy
	HUMIDITY	± 1.00 % RH or Better	Specially tuned systems can be as good as ± 0.60 %	*Based on Probe Accuracy
	CONTROLLER TYPE	PID Controller		
UNIFORMITY	TEMPERATURE	0.10 °C or Better	Typically ± 0.05 °C	
	HUMIDITY	0.30 % RH @ 18 °C to 28 °C or better	Typically ± 0.25 %	
RAMP / SOAK RATE OF CHANGE <small>*Depends on ambient and desiccant conditions</small>	TEMPERATURE	High => Low	1.50°C / minute	*Typical (Based on Desiccant)
		Low => High	5.00 °C / minute	*Typical (Based on Desiccant)
	HUMIDITY	High => Low	5.00 % RH / minute	*Typical (Based on Desiccant)
		Low => High	10.00 % RH / minute	*Typical (Based on Desiccant)
STABILITY	TEMPERATURE	0.05 °C		
	HUMIDITY	0.15 % RH @ 18 °C to 28 °C		
WARM-UP PERIOD	AMBIENT CONDITIONS	30 Minutes Maximum		
	COLD	30 Minutes		
RESOLUTION	DISPLAY	Temperature	0.01 °C	
		Humidity	0.01 % RH	
		Dew Point	0.01 °C (calculated)	
	USB	Temperature	0.01 °C	
		Humidity	0.01 % RH	

## CONSUMABLES

<b>WATER</b>	<b>RESERVOIR</b>	200 ml
	<b>SPILL RESISTANT</b>	Yes
	<b>REQUIRED FLUID</b>	Distilled water only
	<b>EST. REFILL PERIOD</b>	15 days to 1 month (typical) *Depends on usage
<b>DESICCANT</b>	<b>FILL INDICATOR</b>	Floating Ball
	<b>TYPE</b>	Molecular Sieve
	<b>REPLACEMENT</b>	When indicating desiccant is 3/4 used
	<b>REPLACEMENT FREQUENCY</b>	Depends entirely on user workload
	<b>LOCATION</b>	Left side mounted
	<b>FASTENER</b>	Desiccant mounting bracket provided
<b>RECALIBRATION</b>	<b>FREQUENCY</b>	Depends on user uncertainty requirements Once per year recommended

## MECHANICAL

<b>GENERATOR DIMENSIONS</b>	<b>Measurement Type</b>	<b>Width</b>	<b>Depth</b>	<b>Height</b>
	Metric	55.33 cm	40.65 cm	24.65 cm
	English	21.78 in	16.02 in	9.70 in
<b>CHAMBER DIMENSIONS</b>	<b>Measurement Type</b>	<b>Diameter</b>	<b>Depth</b>	
	Metric	14.50 cm	20.00 cm	
	English	5.71 in	7.87 in	
<b>WORKING DIMENSIONS AND VOLUME</b>	<b>Measurement Type</b>	<b>Diameter</b>	<b>Depth</b>	
	Metric	12.50 cm	10.90 cm	
	English	4.92 in	4.29 in	
	Volume	1.5 Liter Effective Working Volume		
<b>WEIGHT</b>	Unit Only	Metric	15.5 kg	
		English	34.0 lb	
<b>POWER SUPPLY</b>		12 Volt DC @ 1A		
<b>STANDARD PORT QUANTITY</b>	Depends on doors	Availability: 6 Ports, 5 Ports, 4 Ports, 2 Ports		
<b>CHILLED MIRROR PORTS</b>	In and Out			
		<b>Probe Range</b>		<b>Actual Unit Range</b>
<b>PROBE ANALOG OUTPUTS AVAILABLE</b>	0 - 1 Volt	Temperature	- 40.00 to + 60.00 °C	+ 5.00 to + 60.00 °C
		Humidity	0 to + 100.00 %	+ 5.00 to + 95.00 %

## Accessories

Doors	Shape	Port Quantity	Connector Type			
	Square / Round	6-Port Door	M36 Connectors			
	Square / Round	4-Port Door	M36 Connectors			
	Square / Round	4-Port Door	SLIMLINE			
	Square	4-Port Chilled MirrorDoor	M36 Connectors			
	Square	2-Port Door	M36 Connectors			
Grommets	Port Type	Size (in)	Size (mm)	Port Type	Size (in)	Size (mm)
	M36	0.000"	0.000	SLIMLINE	0.125"	3.175
	M36	0.125"	3.175	SLIMLINE	0.250"	6.350
	M36	0.250"	6.350	SLIMLINE	0.375"	9.525
	M36	0.375"	9.525	SLIMLINE	0.500"	12.700
	M36	0.500"	12.700	SLIMLINE	0.625"	15.875
	M36	0.625"	15.875	SLIMLINE	0.750"	19.050
	M36	0.750"	19.050	SLIMLINE	0.825"	20.950
	M36	0.875"	22.225	SLIMLINE	1.000"	25.400
	M36	1.000"	25.400			
Expansion Chamber	Description		Width	Depth	Height	
	Standard Expansion Chamber		220mm	286mm	345mm	
Additional	Description		Description			
	Desiccant Canister w/ Material		Chamber Insert			
	Desiccant Clamp					

