

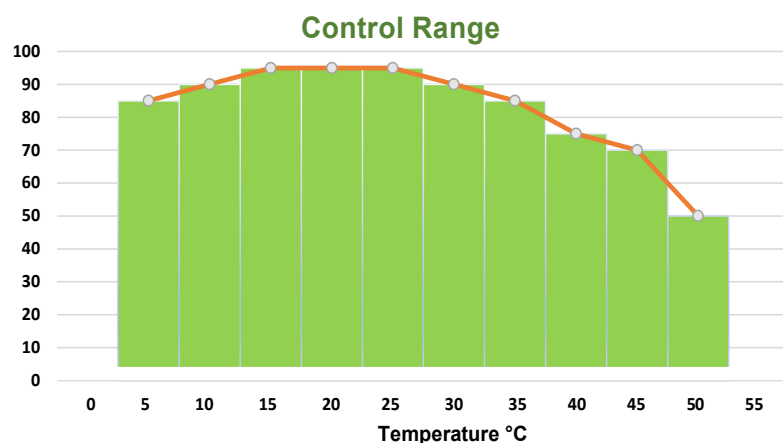
# **GEO** **Calibration**

## **Model 1000 SP**

PRODUCT OVERVIEW

# GENERAL SPECIFICATIONS

CALIBRATION TO (17025 TRACEABLE TO NIST)	TRANSFER STANDARD	No Charge		
	CERTIFICATE	17025 Validation (Additional Fees Apply)		
OPERATING AMBIENT CONDI- TIONS	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			
CALIBRATION SYSTEM ACCURACY	TEMPERATURE	± 0.12 °C Or Better	Typically ± 0.10 °C	*Based on Probe Accuracy
	HUMIDITY	± 1.00 % RH Or Better	Typically ± 0.80 %	*Based on Probe Accuracy
	CONTROLLER TYPE	PID Controller		
UNIFORMITY	TEMPERATURE	0.10 °C Or Better	Typically ± 0.10 °C	
	HUMIDITY	0.30 % RH @ 18 °C to 28 °C Or Better		Typically ± 0.25 %
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	



<b>RAMP / SOAK RATE OF CHANGE</b>			
*Depends on ambient and desiccant conditions			
TEMPERATURE	High → Low	1.50 °C / minute *Typical	
	Low → High	3.00 °C / minute *Typical	
HUMIDITY	High → Low	5.00 % RH / minute *Typical	
	Low → High	10.00 % RH / minute *Typical	
<b>CONTROL RANGE</b>			
TEMPERATURE	5 °C to 55 °C		
HUMIDITY@ 18°C	5 % to 95 % RH	HUMIDITY@ 35°C	5 % to 85 % RH
HUMIDITY@ 23°C	5 % to 95 % RH	HUMIDITY@ 40°C	5 % to 75 % RH
HUMIDITY@ 30°C	5 % to 90 % RH	HUMIDITY@ 50°C	5 % to 50 % RH

# CONSUMABLES

WATER	RESERVOIR	200 ml
	SPILL RESISTANT	Yes
	REQUIRED FLUID	Distilled Water Only
	EST. REFILL PERIOD	15 Days to 1 Month (Typical) *Depends on Usage
	FILL INDICATOR	Floating Ball
DESICCANT	TYPE	Molecular Sieve
	REPLACEMENT	When Indicating Desiccant is 3/4 Used
	REPLACEMENT FREQUENCY	Depends Entirely on User Workload
	LOCATION	Back Side Mounted
	FASTENER	Desiccant Mounting Bracket Provided
RECALIBRATION	FREQUENCY	Depends on User Uncertainty Requirements Once Per Year Recommended

\*\*Information subject to change, please visit our website for updates at [www.geocalibration.com](http://www.geocalibration.com).

# MECHANICAL

	Measurement Type	Width	Depth	Height
GENERATOR DIMENSIONS	Metric	46.00 cm	31.50 cm	15.00 cm
	English	18.11 in	15.16 in	9.26 in
	Measurement Type	Width	Depth	Height
CHAMBER DIMENSIONS	Metric	19.50 cm	13.00 cm	7.45 cm
	English	7.68 in	5.12 in	2.93 in
	Measurement Type	Width	Depth	Height
WORKING DIMENSIONS AND VOLUME	Metric	19.50 cm	13.00 cm	7.45 cm
	English	7.68 in	5.12 in	2.93 in
	Volume	1.5 Liter Effective Working Volume		
WEIGHT	Unit Only	Metric	8.5 kg	
		English	18.74 lb	
POWER SUPPLY FOR EXTERNAL USE	Power Supply	12 Volt DC @ 1A		
STANDARD PORT QUANTITY	Depends on doors	Availability: 3 Ports		
			Probe Range	Actual Unit Range
PROBE ANALOG OUTPUTS AVAILABLE	0 - 1 Volt	Temperature	- 40.00 to + 60.00 °C	+ 5.00 to + 55.00 °C
		Humidity	0 to + 100.00 %	+ 5.00 to + 95.00 %

## Ordering Information

\*Customization is Available

\* Complete Accessory List is Available at [www.geocalibration.com](http://www.geocalibration.com)

### Standard Supply Package

Square 3-Port Door	Desiccant Canister	Fill Syringe
7 Grommets (1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8")	Mains Power Cord	Calibration Documents

### Accessories


Doors	Part Number	Shape	Port Quantity		Connector Type			
	01-001-00-0001	Round	3-Port Door		M36 Connectors			
	01-001-00-0002	Round	3-Port Door		SLIMLINE			
Grommets	Part Number	Port Type	Size (in)	Size (mm)	Part Number	Port Type	Size (in)	Size (mm)
	01-004-09-0001	M36	0.000"	0.000	01-004-09-0020	SLIMLINE	0.125"	3.175
	01-004-09-0002	M36	0.125"	3.175	01-004-09-0021	SLIMLINE	0.250"	6.350
	01-004-09-0003	M36	0.250"	6.350	01-004-09-0022	SLIMLINE	0.375"	9.525
	01-004-09-0004	M36	0.375"	9.525	01-004-09-0023	SLIMLINE	0.500"	12.700
	01-004-09-0005	M36	0.500"	12.700	01-004-09-0024	SLIMLINE	0.625"	15.875
	01-004-09-0006	M36	0.625"	15.875	01-004-09-0025	SLIMLINE	0.750"	19.050
	01-004-09-0007	M36	0.750"	19.050	01-004-09-0026	SLIMLINE	0.825"	20.950
	01-004-09-0008	M36	0.875"	22.225	01-004-09-0027	SLIMLINE	1.000"	25.400
	01-004-09-0009	M36	1.000"	25.400				
Additional	Part Number	Description			Part Number	Description		
	01-200-11-0001	Desiccant Canister w/ Material			01-100-07-0001	Model 1000SP Acrylic Base Plate		
	01-200-36-0011	2 Part Desiccant Tool						

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