

# **GEO** **Calibration**

## **Hygro Max**

PRODUCT OVERVIEW

# 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		
CONTROLLED RANGE *WITH DRY NITROGEN OPTION ** WITH ULTRASONIC OPTION	TEMPERATURE	0 °C to 60 °C		
	HUMIDITY@18 °C	1 %* to 95 % RH	HUMIDITY@30 °C	1 %* to 80 % RH
	HUMIDITY@23 °C	1 %* to 99 %** RH	HUMIDITY@40 °C	1 %* to 60 % RH
	HUMIDITY@28 °C	1 %* to 95 % RH	HUMIDITY@50 °C	1 %* to 50 % RH
CALIBRATION SYSTEM ACCURACY	TEMPERATURE	± 0.1 °C	Typically ± 0.05 °C *Based on Probe Accuracy	
	HUMIDITY	± 0.50 % RH Or Better	Typically ± 0.30 % *Based on Probe Accuracy	
	CONTROLLER TYPE	PID Controller		
UNIFORMITY	TEMPERATURE	0.10 °C		
	HUMIDITY	0.30 % RH @ 23 °C		
STABILITY	TEMPERATURE	0.05 °C		
	HUMIDITY	0.10 % RH @ 23 °C		
RESOLUTION	DISPLAY	Temperature	0.01 °C	
		Humidity	0.01 % RH	
		Dew Point	0.01 °C (Calculated)	
RAMP / SOAK RATE OF CHANGE *Depends on ambient and desiccant conditions	TEMPERATURE	High → Low	0.50 °C / minute	*Typical (Based on Desiccant)
		Low → High	1.00 °C / minute	*Typical (Based on Desiccant)
	HUMIDITY	High → Low	1.00 % RH / minute	*Typical (Based on Desiccant)
		Low → High	2.50 % RH / minute	*Typical (Based on Desiccant)
*In high humidity environment, please set the temperature first. Once temperature settled, then set the humidity.				

# CONSUMABLES

WATER	RESERVOIR	1.75 L		
	SPILL RESISTANT	Yes		
	REQUIRED FLUID	Distilled Water Only		
	EST. REFILL PERIOD	15 Days (Typical)	*Depends on Usage	
	FILL INDICATOR	Floating Ball		
DESICCANT	TYPE	Molecular Sieve		
	QUANTITY	3		
	USE	Auto Detection and Switch		
	REPLACEMENT	When Indicating Desiccant is 3/4 Used		
	REPLACEMENT FREQUENCY	Depends Entirely on User Workload		
	LOCATION	Front Mounted		
	FASTENER	Desiccant Doors		
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 AND ELECTRICAL

<b>BODY ENCLOSURE</b>	<b>Material</b>	Powder Coated Aluminum		
	<b>Measurement Type</b>	<b>Depth</b>	<b>Width</b>	<b>Height</b>
<b>GENERATOR DIMENSIONS</b>	<b>Metric</b>	52.15 cm	86.50 cm	51.27 cm
	<b>English</b>	20.53 in	34.05 in	20.18 in
<b>CHAMBER DIMENSIONS</b>	<b>Measurement Type</b>	<b>Depth</b>	<b>Diameter</b>	
	<b>Metric</b>	23.01 cm	34.44 cm	
	<b>English</b>	9.06 in	13.55 in	
	<b>Volume</b>	21.00 Liters		
<b>WORKING DIMENSIONS AND VOLUME</b>	<b>Measurement Type</b>	<b>Depth</b>	<b>Diameter</b>	
	<b>Metric</b>	211.97 mm	32.03 cm	
	<b>English</b>	8.345 in	12.61 in	
	<b>Volume</b>	17.00 Liters		
<b>CHAMBER ENCLOSURE</b>	<b>Material</b>	Carbon Fiber with Aluminum/ Eva Insulation		
<b>PROBE PORTS</b>		12 Ports		
<b>WEIGHT</b>	<b>Metric</b>	50.8 kg		
	<b>English</b>	112.0 lb		
<b>POWER SUPPLY</b>	Universal 100 - 260 VAC - 50/60 Hz			
<b>EXTERNAL INTERFACE</b>	<b>USB</b>	Cable		

## Ordering Information

\*Customization is Available

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

### Standard Supply Package

12 Port Door	3 Desiccant Canisters	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	Shape	Port Quantity	Description	Connector Type	Part Number			
	Hinged	10-Port Door	Hygro Max 10 Port Door	Slimline Connectors	01-410-01-0015			
	Hinged	12-Port Door	Hygro Max 12 Port Door	Slimline Connectors	01-410-01-0029			
			Chilled Mirror Door Insert		01-410-01-0021			
Grommets	Port Type	Size (in)	Size (mm)	Part Number	Port Type	Size (in)	Size (mm)	Part Number
	M36	0.000"	0.000	01-004-09-0001	SLIMLINE	0.125"	3.175	01-004-09-0020
	M36	0.125"	3.175	01-004-09-0002	SLIMLINE	0.250"	6.350	01-004-09-0021
	M36	0.250"	6.350	01-004-09-0003	SLIMLINE	0.375"	9.525	01-004-09-0022
	M36	0.375"	9.525	01-004-09-0004	SLIMLINE	0.500"	12.700	01-004-09-0023
	M36	0.500"	12.700	01-004-09-0005	SLIMLINE	0.625"	15.875	01-004-09-0024
	M36	0.625"	15.875	01-004-09-0006	SLIMLINE	0.750"	19.050	01-004-09-0025
	M36	0.750"	19.050	01-004-09-0007	SLIMLINE	0.825"	20.950	01-004-09-0026
	M36	0.875"	22.225	01-004-09-0008	SLIMLINE	1.000"	25.400	01-004-09-0027
	M36	1.000"	25.400	01-004-09-0009				
Additional	Description	Part Number	Description	Part Number				
	Desiccant Canister w/ Material	01-250-11-0001	Chamber Insert	01-410-01-0003				
	External Desiccant	01-450-01-0034						


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



**GEO**  
*Calibration*

**Humidity Control Company**



Proudly Made in the USA 

Email: [Sales@GeoCalibration.com](mailto:Sales@GeoCalibration.com) Website: [www.GeoCalibration.com](http://www.GeoCalibration.com)

© 2019 GEO Calibration Inc. All rights reserved.

Rev A