

HygroGen2 HG2

Since its launch, the Rotronic HygroGen has defined the standard for portable humidity and temperature calibration. Hundreds of users worldwide have identified that this tool for the rapid generation of stable temperature and humidity conditions can save significant amounts of time in performing calibrations of all types of humidity instruments from all manufacturers.

The HygroGen2 further satisfies the stringent demands of quality and compliance regulations with its ability to calibrate instruments over their full working range, and is embraced throughout the pharmaceutical industry as the leading instrument in its class and is favored in ISO 17025 humidity calibration laboratories across the world.

Being portable and robust, it can be set up at the installation location allowing for complete system qualification. The rock-solid stability, minimal thermal gradients and quick set-point changes of HygroGen2-S are now replicated in a new family member: HygroGen2-XL, which boasts a chamber with 10 times the capacity.

External Chilled Mirror Reference Integration

(formerly "AutoCal+") External chilled mirror Reference Integration further extends the utility of the generator, with the ability to integrate chilled mirror hygrometers as the AutoCal calibration reference or within the Remote API.

APPLICATIONS

On-site calibration solution for all users of humidity and temperature measuring equipment.

FEATURES

- Generates stable humidity and temperature conditions ($\leq \pm 0.1\% \text{rh}$, $\leq \pm 0.01\text{ }^{\circ}\text{C}$)
- Calibration solution for the laboratory and on-site
- Humidity equilibrium typically in only 5 minutes for HG2-S, 15 minutes for HG2-XL
- Calibrates multiple probes simultaneously
- «AutoCal» automatic calibration (optional)
- «Remote API» logging and control with third-party software (optional)



HygroGen2 with external chilled mirror hygrometer – Michell S8000 Remote



HG2-S and HG2-XL in comparison

Video HygroGen2

Interested? Then scan the QR code!



Delivery package

- Instruction manual
- SCS certificate for reference probe

Recommended accessories

- See HygroGen2 accessories
- «AutoCal» automatic calibration
- Extended ranges of application «HumiExt» and «TempExt»
- «ExtRef» chilled mirror reference
- «RemoteSS» remote screen sharing
- «RemoteAPI» programming interface for remote control

HygroGen2 Specifications		HG2-S	HG2-XL
Chamber volume		2 liters	20 liters
Working volume		1.5 liters	17 liters
Humidity changes (<±0.1 %rh stability)	5...95 %rh	<5 minutes	<15 minutes
Temperature changes (<±0.01 °C stability)	23...50 °C	<5 minutes	<15 minutes
	23...0 °C	<25 minutes	<35 minutes
Temperature gradients	15...50 °C	<±0.05 °C	<±0.05 °C
	5...60 °C	<±0.1 °C	<±0.1 °C
	0...5 °C	<±0.15 °C	<±0.15 °C
Probe mounting		Up to 6 probes through door ports	8 probes through the door, plus internal shelf racks
Weight & dimensions		13 kg, 45 x 41 x 21 cm	37 kg, 80 x 62 x 41 cm
Working principle	Mixed flow with desiccant dryer cell and piezoelectric humidifier; Peltier thermoelectric element with radial chamber mixing fan		
Control probe specification	± 0.8 %rh (10...30 °C), ± 2 %rh (0...60 °C) ± 0.1 K (10...30 °C), ± 0.3 K (0...60 °C)		
Typical calibration uncertainty	± 1.5 %rh (k=2) at 23 °C, ± 0.15°C (k=2) 15...50 °C		
Sensor	HygroClip2, capacitive RH sensor, Pt100 temperature sensor		
Control type	Embedded multiple PID controller, touch screen graphical user interface		
Programmer function	20 user programs can be saved, up to 200 set-points per program can be changed		
External sample loop for MBW reference	Temperature controlled outlet and inlet, 6 mm fittings		
USB ports	7 front, 2 rear		
Integrated software	Rotronic HW4		
Water level	Low and high alarm, bar graph status indication		
Water quality	UV sterilization, auto time cycling		
Desiccant condition	Condition monitored during control operation		
Optional enhanced features	Temperature and humidity range extensions, AutoCal, External MBW/RHS Reference Integration, Remote Screen Share, Remote API		
Power supply	110...240 VAC 50/60 Hz, 3 A (240 VAC) 6A (110 VAC)		
Housing	Powder coated aluminum and steel, IP20		
Operating conditions	10-35 °C, <2000 m altitude		
CE	Safety:	EN 61010-1:2001	
	EMC:	EN 61326-1:2006	
		EN 61000-6-1:2007	

Order code	Description
HG2-S	HygroGen2 with touch screen, calibrated control/reference probe, set-point control & programmer function, heated sample loop, desiccant cell, fill syringe, embedded HW4 software. Order chamber door separately
HG2-XL	HygroGen2-XL with touch screen, calibrated control/reference probe, set-point control & programmer function, heated sample loop, 2 x desiccant cell, fill syringe, embedded HW4 software.
MBW473-RP2-SET	MBW473 dew point mirror, RP2 measurement head, SCS certification
MBW473 SH2-SET	MBW473 dew point mirror, SH measurement head, SCS certification Recommendation, SH placed inside the HG-XL on the top shelf, sampling directly from the inside
HG2-AutoCal-Code	Extension (activation key): automatic calibration function
HG2-ExtRef-Code	Extension (formerly Autocal+, requires AutoCal or RemoteAPI, activation key): MBW/RHS External Reference Integration - enables MBW chilled mirror as external reference
HG2-TempExt-Code	Extension (activation key): extended temperature range -5...60 °C
HG2-HumiExt-Code	Extension (activation key): extended humidity range 2...99 %rh
HG2-RemoteSS-Code	Extension (formerly Remote, activation key): Remote Screen Share
HG2-RemoteAPI-Code	Extension (activation key): programming interface for remote control

HygroGen2 / HygroGen2-XL accessories**Consumables**

HG2-DES-3	Desiccant for molecular sieve (3 kg)
HG2-DC	Additional desiccant cell; pre-filled with molecular sieve
HG2-FILL	Fill tube and syringe

Chamber doors, plugs and probe sleeves

HG2-D-888888	HG2-S door, 6 x 30 mm ports with 6 bungs; order specific B8 sleeves to suit smaller probe diameters
HG2-DP-00000	HG2-S clear acrylic door (no ports) for instruments with displays
HG2-B8	30 mm bung for HG2-D-888888
HG2-B8-xx	B8 probe sleeves for HG2-D-888888 (external: 30 mm; internal: probe diameter see xx diameter codes)
HG2-D-xxxxx	HG2-S custom door for > 30 mm ports, please ask your Rotronic dealer for the doors available
HG2-Bxx	Custom bung
HG2-Bxx-xx	Custom probe adaptor sleeves

Accessories

HG2-TB	HG2-S transit bag, lightweight
HG2-TC	HG2-S heavy-duty transit case
HG2-AC3001-L/050	HygroClip2 calibration cable, 50 cm, USB connector
HG2-CAM	Probe sleeve with high definition USB cam



HG2-D-888888 door with plugs and probe sleeves



Door cross section



HygroGen bag



HygroGen case