HygroLab C1

Laboratory application

ROTRONIC provides a high-end laboratory device – the HygroLab C1 – for water activity measurements with up to four probes. Connect station probes and insertion probes for measuring water activity in cheese, meat, tobacco, building materials, animal feed, pharmaceuticals products and much more.

Validated software

Easy-to-use and intuitive, the laboratory grade indicator can be used by anyone. HW4 running on a PC provides remote monitoring with charting and data recording functions.



- 4 input channels for HC2 station probes or HC2 insertion probes can be connected for measurement of water activity, relative humidity and temperature
- Aw Quick function for fast measurement results (typically 4-5 minutes)
- Audible alarm to indicate completed measurement
- $\bullet\,$ Saves up to 2,000 data records with %RH, °C/°F, date and time



Order code	HygroLab C1	
Probe connections	4 x HC2 station probe or HC2 insertion probe	
Parameters shown	Aw, % RH, °C, °F	
Aw Quick function	Integrated and via HW4 software HW4-P-QUICK-Vx (in shipment included)	
Calculations	All psychrometric calculations available or user defined calculations	
Probe adjustment	Single or multiple point for relative humidity & temperature	
	One or two point temperature	
Memory	4 x 500 Aw values (2,000 Aw values)	
Measurement interval	1 s	
Start-up time	3 s	
Power supply	816 VDC with AC adapter	
Interfaces	Ethernet and USB	
HW4 compatible	V3.1 and higher	
Range of application	-1060 °C (14140 °F) / 01 Aw / 0100 %RH	
LCD	3-line alphanumeric with trend indicators	
Clock	Real time clock provides a time stamp for every measurement	
Current consumption	Max. 120 mA (12 VDC, backlight ON, 4 probes connected, Ethernet)	
IP protection class	IP21	
CE / EMC conform	EMC 2008/108/EG	
FDA / GAMP	FDA 21 CFR part 11 / GAMP5	
Dimensions /Weight	225 x 170 x 70 mm / 1100 g	
Material	Aluminum, ABS-757	



Aw station probes

The station probes are designed for using with HygroLab C1 or HygroPalm HP23-AW-A. Measurement of water activity with this digital probe is precise, fast and easy. The probe can be calibrated with the HygroLab C1 or via the HW4 software. Minimized internal volume of the sensor chamber ensures fast equilibrium with all products, and an all metal construction ensures good temperature stability during measurements, with stainless steel used on all critical surfaces. Sample holders, sample containers and a sealing mechanism are detailed in accessories.



Order code	HC2-AW
Probe type	Measurement probe with UART interface
Connection	Via UART, 1 m cable
For use with	HygroLab C1, HP23-AW-A
Accuracy at 23 °C ±5 K (73.4 °F)	±0.008 Aw / ±0.8 %RH / ±0.1 K
Temperature dependence	0.001 K/K, 0.0002 aw/K
Sensor	HYGROMER® WA-1 / Pt-100, 1/3 DIN Class B
Calculations	Dew or frost point
Long term stability	<1 %RH / year
Power supply	Via display instruments
Range of application	-4085 °C (-40185 °F) / 0100 %RH
Filter type	Wire mesh filter with 2025 µm pore size
Response time τ63	<20 s
Measurement interval	1 s
Start-up time	1.5 s
IP protection	IP20
CE / EMC conformity	EMC 2008/108/EG
FDA / GAMP	FDA 21 CFR part 11 / GAMP5
Dimensions / Weight	Ø68 x 60 mm / 600 g
Material	Stainless steel, aluminum







WP-40



Typical accessories

Sample holders: WP-14-S, WP-40, WP-40TH

Disposable sample container: PS-14 (14 mm deep), PS-40 (40 mm deep)

Note: Order sample containers separately.

Sample holders can also be used as calibration device.