

HYGROLAB

HYGROCLIP[®]

Humidity goes Digital



Multi-channel Humidity & Water Activity Analyser

- Precision measurement of humidity, temperature and water activity
- Interchangeable probes and water activity stations
- Four probes connected simultaneously
- Dew-point measurement and other calculated values
- Instruments can be connected as a network
- SWISS MADE

rotronic[®]

LEADING IN HUMIDITY MEASUREMENT

HygroLab is the new series of benchtop display units for the measurement of humidity and water activity (a_w).

The Digital Advantage

Based on the very latest digital technology, HygroLab offers the user outstanding performance and flexibility, with up to four simultaneous probe inputs and an impressive number of functions. Measurement probes can be interchanged without loss of accuracy, psychrometric calculation functions, software based measurement analysis and multi-point calibration.

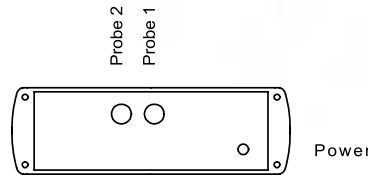
An extensive range of compatible probes and measurement stations make the HygroLab suitable for almost any laboratory or production application.

Developed for busy laboratory environments where multiple measurement stations or probes co-exist, the HygroLab 2 is supplied with a networking feature, allowing up to 32 instruments to be simultaneously controlled and monitored from one PC.

Which HygroLab is for you?

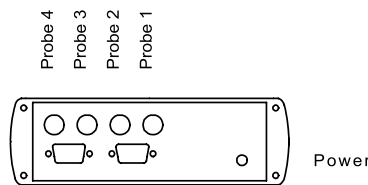
HygroLab 1 Key Features

- Two digital or analogue probes
- One point digital probe calibration



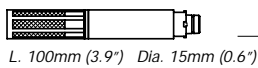
HygroLab 2 Key Features

- Four digital or analogue probes
- Single or Multi-point digital probe calibration
- Full psychrometric calculation functions
- RS232/RS485 output



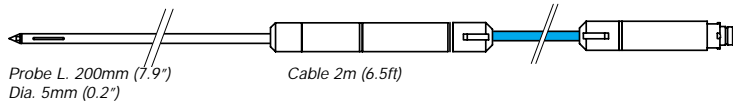
HygroLab Digital Probe Options

The ROTRONIC HygroClip digital probes are available in different configurations to meet the requirements of each application:



HygroClip S

for measurement in air, -40...+85 °C (-40...+185 °F), wire mesh Filter



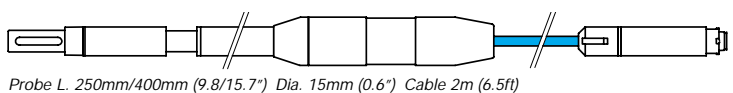
HygroClip SP05

for measurement in walls and air ducts, -40...+85 °C (-40...+185 °F)



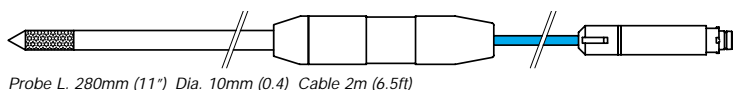
HygroClip SC05

for air measurement in tight spaces -40...+100 °C (-40...+212 °F)



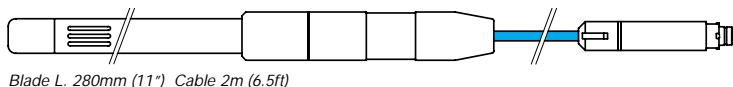
HygroClip HK25 / HK40

for air probe measurement at high temperature, wire mesh filter; HK25: -50...+150 °C (-58...+302 °F) HK40: -50...+200 °C (-58...+392 °F)



HygroClip HP28 tubular probe

for measurement of materials in bulk, -40...+85 °C (-40...+185 °F), sintered stainless steel filter



HygroClip HS28 sword probe

for measurement of paper stacks/rolls, -40...+85 °C (-40...+185 °F)



HygroLab a_w Options



AWVC-DIO water activity station with ventilation for rapid equilibrium

Temperature operating range 5...50 °C



WP-40TH sample holder with integrated water jacket for temperature control; for disposable sample containers PS-40/PS-14



AWD analogue water activity station with zero hysteresis humidity sensor

Temperature operating range 5...40 °C



WP-40/WP-14 sample holder shown with disposable sample containers PS-40/PS-14

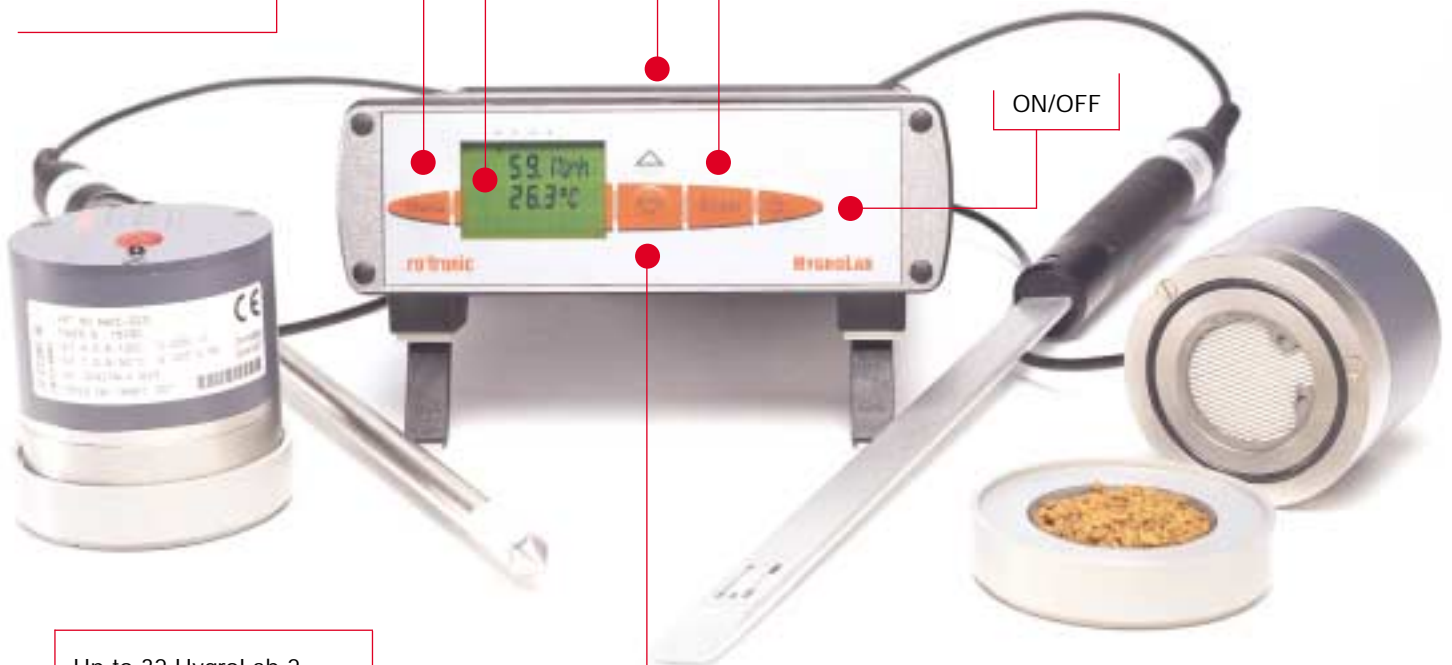
Feature Overview

LC Display: Includes probe input indicator, 2 line numeric display, 1 line alphanumeric

Multiple inputs:
HygroLab 1; 2 probes
HygroLab 2; 4 probes

MENU: Press this key to activate the functions menu

Enter: Confirms selection



Up to 32 HygroLab 2 instruments can be networked together. 128 measurement probes controlled by one PC!

Up/Down:
Changes displayed probe and navigates



Product Summary & Technical Data



FEATURES	HYGROLAB 1	HYGROLAB 2
Probe Connections	2	4
Signal Inputs	2 digital or 4 analogue	4 digital or 8 analogue
RS232 Interface, RS485 Network	No	Yes
Digital probe adjustment		
1 point %rh, °C/°F	Yes	Yes
4 point %rh, 2 point °C/°F	No	Yes
4 point %rh, 2 point °C/°F, via PC	No	Yes
Calculation & Unit Display		
Calculated humidity values	No	Full range of calculated values including: Dew-point, wet-bulb, enthalpy, mixing ratio, water vapour pressure, saturation vapour pressure
Pressure compensation of calculated values	No	Fixed pressure value, adjustable with HW3 software or pressure probe input
Humidity displayed in a _w units	No	Yes
Technical Specifications (incl. probe)		
Maximum measuring range	Probe dependent; 0...100%rh, -50...+200 °C (-100...+390 °F)	
Accuracy at 23 °C	± 1.5 %rh, ± 0.3 K	
Repeatability	Better than 0.5 %rh/0.1 °C/0.2 °F/AWD: 0.1 %hr/0.1 °C/0.2 °F	
Sensors	Hygromer C94/humidity Hygrolyt DMS 100H, Pt100 1/3 DIN temperature	
Instrument operating limits	0...99%rh non-condensing, -10...+60 °C (14...140 °F)	
Display type	Liquid Crystal 1 line alphanumeric, 2 line numeric	
Display resolution	0.1 %rh, 0.1 °C/°F, 0.01 calculated value	
Housing	Aluminium	
Power	9V mains adapter, +Tip	
CE conformity	EMV: EN50081-2 EN/EN50082-2	

ORDERING INFORMATION	
Order code:	Description:
HygroLab 1	Humidity temperature meter, two probe inputs
HygroLab 2	Humidity temperature meter, four probe inputs, full psychrometric calculation
AC1207	Mains adapter for HygroLab 1 & 2
AWVC-DIO	Water activity station with ventilated measurement chamber
AWD	Water activity station with zero hysteresis sensor
WP-14	Sample holder 14 mm depth
WP-40	Sample holder 40 mm depth
WP-40TH	Sample holder with jacket for temperature control
PS-14	Disposable sample containers to suit WP-14
PS-40	Disposable sample containers to suit WP-40/40TH
MOK-02-B5	Cable, HygroClip probes to HygroLab
HygroClip S	Standard probe for air, -40...+85 °C (-40...+185 °F)
HygroClip SP05	5mmØ Insertion probe, -40...+85 °C (-40...+185 °F)
HygroClip SC05	Mini probe for measurement in tight space, -40...+100 °C (-40...212 °F)
HygroClip HK25/40	Extended probe for high temperatures, HK25 -50...+150 °C (-58...302 °F), HK40 -50...+200 °C (-58...392 °F)
HygroClip HP28	10 mmØ insertion probe, -40...+85 °C (-40...+185 °F)
HygroClip HS28	Sword probe, -40...+85 °C (-40...+185 °F)
HygroData-LAB	HW3 software CD Rom Windows 95, 98, NT compatible, connecting cable