

# HYGROPALM

# HYGROCLIP<sup>®</sup>

## Humidity goes Digital



## Portable Humidity Temperature Indicator

- Accurate measurement of humidity and temperature
- Dew-point and other calculated parameters
- Calibrator function for on-site maintenance of transmitters
- Wide choice of interchangeable probes
- Optional docking station with battery charger & connection to PC

# rotronic<sup>®</sup>

LEADING IN HUMIDITY MEASUREMENT

HygroPalm® uses the very latest in digital technology. Three versions satisfy the needs of all users. Each accepts a wide range of probes for maximum application flexibility. The probes are interchangeable to virtually eliminate any downtime during calibration or maintenance.

## The Digital Advantage

The HygroPalm offers a wide range of features, including calculation of various humidity parameters, precise software based probe calibration, and on-site diagnostics / calibration of transmitters. The optional docking station is used to recharge the battery and to connect to a PC for data logging\* and instrument configuration.

\* Not available with HygroPalm1

## Which HygroPalm is right for you?

### HygroPalm 1 Key Features

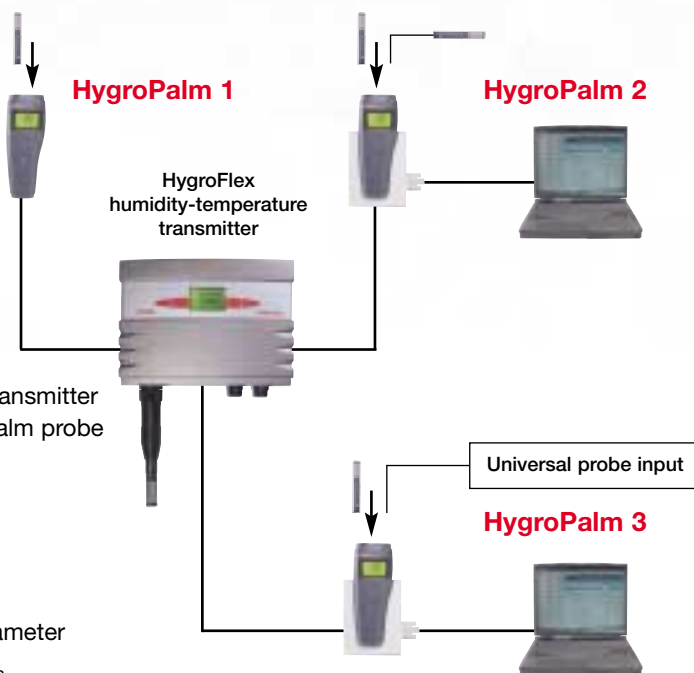
- Portable indicator for %RH, temperature
- Display of dew-point or wet-bulb
- Indicator can be used to display transmitter readings
- 1-point probe adjustment directly from keypad

### HygroPalm 2 Key Features

- All the features of HygroPalm 1
- + Full range of psychrometric calculations
- + Multipoint probe calibration directly from keypad
- + Second input for digital probe or connection to a transmitter
- + 1-point adjustment of a transmitter against HygroPalm probe

### HygroPalm 3 Key Features

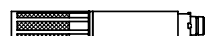
- All the features of HygroPalm 2
- + Full transmitter calibration functions
- + Universal probe input for pressure, air-flow etc
- + Dynamic pressure compensation of calculated parameter



See page 4 for a full summary of technical specifications and features.

## HygroPalm Probe Options

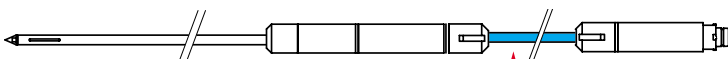
The ROTRONIC HygroClip digital probes are available in different configurations so as to meet the requirements of each application:



L. 100mm (3.9") Dia. 15mm (0.6")

### HygroClip S

for measurement in air, max. 85°C (185°F) wire mesh filter



Tube L. 200mm (7.9")  
Dia. 5mm (0.2")

Cable 2m (6.5ft)

### HygroClip SP05

for measurement in air ducts, max. 85°C (185°F)



Dia. 5mm (0.2")  
Cable 2m (6.5ft)

### HygroClip SC05

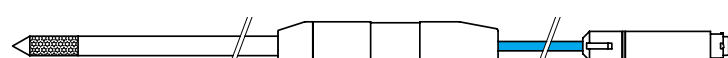
for measurement in tight spaces, max. 100°C (212°F)



Tube L. 250mm/400mm (9.8/15.7") Dia. 15mm (0.6) Cable 2m (6.5ft)

### HygroClip HK25 / HK40

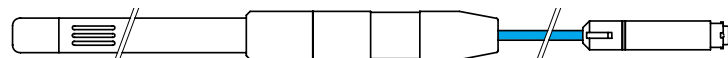
air probe for measurement at high temperature HK25: max. 150°C (302°F)/HK40: max. 200°C (392°F) wire mesh filter



Tube L. 280mm (11") Dia. 10mm (0.4) Cable 2m (6.5ft)

### HygroClip HP28 insertion probe

for measurement of materials in bulk, max. 85°C (185°F) sintered steel filter



Blade L. 280mm (11") W. 18mm (0.7") T. 4mm (0.16") Cable 2m (6.5ft)

### HygroClip HS28 sword probe

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

## Feature Overview

Wide range of HygroClip probes satisfy most application requirements. HygroClip probes can be interchanged without affecting measurement accuracy

The large LC display shows any two of the following: relative humidity, temperature or calculated parameter.

When the HygroPalm is connected to a transmitter, the LCD also displays data from the transmitter.

Up to two probes and RS232 connector (depends on model). Any probe input can be used to establish connection with a transmitter

Ergonomic and robust ABS housing with rubber 'grip-strip'

Docking station (optional)

Jack for AC adapter (battery charge)

RS232 connection to PC

Battery compartment

### Five button keypad

#### ON/OFF

Also activates display hold function

#### MENU

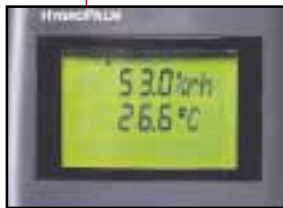
Switches function menu on/off

#### UP/DOWN

For menu navigation and selection of probe

#### ENTER

Optional HW3 software for probe calibration, on-line data logging and graphing, psychrometric calculations.





## Product Summary & Technical Data



FEATURES	HYGROPALM 1	HYGROPALM 2	HYGROPALM 3
Number of probe inputs	1	2	2
Probe type	Digital (HygroClip)	Digital (HygroClip)	Digital (HygroClip) Analog 0..2.5V, 9V DC, 10mA
RS232 connector	No	Yes	Yes
<b>Probe Adjustment:</b>			
1 point %RH, °C/°F, directly from keypad	Yes	Yes	Yes
4 point %RH, 2 point °C/°F, directly from keypad	No	Yes	Yes
4 point %RH, 2 point °C/°F, via PC (HW3 software)	No	Yes	Yes
<b>Transmitter Calibration Functions:</b>			
Adjustment against physical standard	No	No	Yes
Adjustment against reference probe	No	Yes	Yes
Display of measured values	Yes	Yes	Yes
Display of transmitter status	No	Yes	Yes
<b>Calculation &amp; Unit Display:</b>			
Dew-point and wet bulb temp.	Yes	Yes	Yes
Full range of psychrometric calculations	No	Dew-point, wet-bulb, enthalpy, mixing ratio, water vapor pressure, saturation vapor pressure. User defined scale.	
<b>Technical Specifications:</b>			
Maximum measuring range	Probe dependent; 0...100%RH, -50...+200°C (-58...392°F)		
Display operating range	0...99%RH (non-condensing), -10...+60°C (14...140°F)		
Display type	Liquid Crystal 4 line alphanumeric		
Display resolution	0.1%RH/°C/°F, 0.001 calculated parameter (depends on parameter)		
Instrument power	30mA max. power consumption, 9V alkaline battery, 100 hours 9V rechargeable, 75 hours, recharging through docking station, 9V AC adapter, +Tip (docking station required)		
Accuracy (at 23°C/73°F)	±1.0%RH, ±0.2°C (0.4°F) with 4 point calibration. ±1.5%RH, ±0.2° (0.4°F) standard		
CE Conformity	EN 50081-2, EN 50082-2, EN 50081. 2-1		

### ORDERING INFORMATION

Order code:	Description:
HygroPalm 1	Humidity temperature indicator, dew-point/wet-bulb calculation
HygroPalm 2	Humidity temperature indicator, full psychrometric calculations
HygroPalm 3	Humidity temperature indicator, full psychrometric calculations, full calibration functions
HygroPalm set	HygroPalm, (specify 1, 2 or 3) HygroClip S probe, ER15 calibration device, EA50 (50%) calibration solutions, case
PalmDock	Docking station for battery charging and PC connection include AC adapter & RS232 cable
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 200°C (392°F)
HygroClip HP28	10mmØ insertion probe, -40...+85°C (-40...+185°F)
HygroClip HS28	Sword probe, -40...+85°C (-40...+185°F)
HygroData HP	Cable (Palm to PC) and HW3 software for HygroPalm 2 & 3
MOK-02-DAT05	2m extension cable, HygroClip to HygroPalm