HYGROCLIP 2. HS-28 Sword Temperature Probes.



For rapid measurement of ERH and temperature in paper, card textiles and any sheet materials. The robust, yet lightweight sword has rounded edges to minimise insertion damage and thermally equilibrates extremely quickly with the material to give you a fast result.

HC2-HS28 is compatible with the HygroPalm 22

SPECIFICATIONS:

Applications ERH measurement in paper, cardboard, textile and other

Main features Humidity range: 0... 100%rh

Limits on temperature sensor: -40°C to 85°C

Thickness sword: 4 mm (0.16 ") Width: 22 mm (0.87 ") Length: 280 mm (11.0 ")

Sensor cable Length: 2 metres (6.5 ft) Handle: POM, black sword:: Aluminum

Probe type HygroClip® 2

Humidity sensor ROTRONIC Hygromer® IN-1

Temperature sensor Pt100, 1/3 Class B
Long term stability better than 1%rh / year

Measuring range with interchangeable probe 0...100 %rh and -40...85 °C

Calibration / adjustment Digital via HygroPalm

Accuracy w. adjustment profile "standard" at 23 °C and 10, 35, 80 %rh \pm 0.8%rh / \pm 0.1 K

Accuracy w. adjustment at 23 °C and 10, 20, 30, 40, 50, 60, 70, 80, 90 % rh ± profile "High Precision" at 23 °C and 10, 20, 30, 40, 50, 60, 70, 80, 90 % rh ± 0.5%rh / 0.1 K

Accuracy w. adjustment at 3 selectable temperatures from -10 to 70 °C and 20 profile "Custom" at 3 selectable humidity values ± 0.5%rh / K 0.1

Reproducibility Airchip < 0.02 %rh / 0.01 K
Response time t 63 < 15 seconds

Measurement interval typically 1 second (without calculations)

Operating range electronics -40...100 °C and 0...100 %rh

Alerting Yes, programmable

User information From HW4 software devicemanager

Data processing via HW4 Via Interfacecable

Device Protection by password Yes via HW4

Sensor diagnostics (drift, state) programmable, factory setting: Off

Audit Trail/ electronic records FDA CFR21 Part 11/GAMP comp.

External datalogging 2000 records

Power supply / Power consumption 3.2...5 VDC ± 0 % / < 4.5 mA

Type of output signals $2 \times 0...1 \text{ VDC}$ Analog output signal 0...1 V = 0...100 %rh

(standard) 0...1 V = -40...60 °C

Digital output signal UART = Universal Asynchronous Receiver Transmitter

(standard) (ASCII) Service Interface UART

Reverse voltage protection Mechanically in the connector

Max. able length service cable 5 m

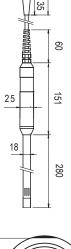
Probe material Aluminium

Probe cable material TPU, black

Enclosure material Handle: POM, black sword:: Aluminum

Weight approximately 200g

FDA/GAMP compatibility FDA CFR21 part 11 & GAMP



15

75



Electrical connections: (all HygroClip2 probes with connector)

1 • V+ (3.2 VDC to max. 5 VDC, ±0%; recommended: 3.3 VDC)

GND (ground, digital and power)

RXD (UART)

TXD (UART)

Analog signal %rh (0...100 %rh=0...1 V)

Analog signal °C (-40...60 °C = 0...1 V)

7 AGND (analog ground)

