

Standard and high precision probes

HC2A-S / HC2A-S3 and HC2A-SH/HC2A-S3H

The HC2A-S / HC2A-S3 is the most versatile probe from Rotronic and forms the basis of the product portfolio. It measures humidity and temperature and calculates the dew/frost point. The HC2A-SH/HC2A-S3H fulfills the highest demands for measuring accuracy.

APPLICATIONS

HVAC, food industry, building services equipment, paper, textile and pharmaceutical industries.

FEATURES

- Accuracy: standard probe (HC2A-S / S3): $\pm 0.8\%$ rh, ± 0.1 K, at 10...30 °C
- Accuracy: high precision probe (HC2A-SH / S3H): $\pm 0.5\%$ rh, ± 0.1 K, at 10...30 °C
- Range of application: -50...100 °C / 0...100 %rh
- Digital interface (UART) and scalable analog outputs, 0...1 V
- Standard: adjusted at 23 °C and 10, 35, 80 %rh
- High precision: adjusted at 23 °C and 10, 20, 30, 40, 50, 60, 70, 80, 90 %rh, then calibrated at 20, 50, 80 %rh
- Standard analog output scaling: 0...1 V = -40...60 °C / 0...100 %rh

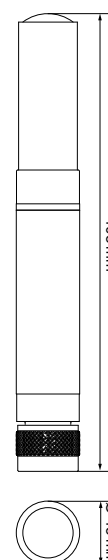
Order code	HC2A-S / HC2A-S3	HC2A-SH / HC2A-S3H
Probe type	S: black, S3: white	SH: black, S3H: white
Dimensions	Ø 15 x 108 mm	
Range of application	-50...100 °C, 0...100 %rh	
Accuracy	$\pm 0.8\%$ rh, ± 0.1 K, at 10...30 °C (10...90 %rh)	$\pm 0.5\%$ rh, ± 0.1 K at 10...30 °C (10...90 %rh)
Power supply	3.3...5 VDC, adjusted at 3.3 VDC	
Current consumption	~4.5 mA	
Long-term stability	<1 %rh / year	
Sensor type	ROTRONIC HYGROMER® HT-1, PT100 1/3 Class B	
Filter type	S: polyethylene white, 40 µm S3: polyethylene white, 40 µm	SH: polyethylene white, 40 µm S3H: polyethylene white, 40 µm
Response time	<15 s, without filter	
Max. wind velocity	3 m/s, without filter 20 m/s with polyethylene filter	
Housing material	Polycarbonate	
Weight / IP protection	10 g / IP65	



HC2A-S
HC2A-SH



HC2A-S3
HC2A-S3H



Compatible

- | | |
|----------------------------|----------------|
| • Handheld instruments | HP32 |
| • Transmitters | HF5, PF4, PF5 |
| • Meteorology transmitters | MP102H, MP402H |

Delivery package

- Factory adjustment certificate
- Short instruction manual
- Polyethylene filter

Recommended accessories

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| • Mounting flange | AC5005 |
| • Filters | |
| • Extension cable 2 m, black | E2-02A |
| • Adapter cable, open ends, 2 m | E2-02XX-ACT/01 |
| • Calibration device | ER-15 |
| • Humidity standard for calibration 10 %rh | EA10-SCS |
| • Humidity standard for calibration 35 %rh | EA35-SCS |
| • Humidity standard for calibration 80 %rh | EA80-SCS |