



# HYGROCLIP XD

## THE MOST VERSATILE HYGROCLIP2 PROBE YET

### LATEST AIRCHIP 3000 DIGITAL TECHNOLOGY

- Measures relative humidity & temperature
- Calculates dew/frost point
- Power supply range: 5...16 VAC / 5...24 VDC
- Outputs: 0...1 V / 0...5 V / 0...10 V (standard probes)  
0...1 V / 0...5 V / 0...10 V / 0...20 mA / 4...20 mA (industrial probes)
- Voltage outputs configurable via software
- Highest precision and reproducibility
- Excellent long-term stability <1 %RH / year
- Digital interface for calibration and measurement processing



## TECHNICAL INFORMATION

### Versions

The HygroClip XD is available as standard probe or as industrial probe with remote sensor. The standard versions come in the colors black or white.

### Standard versions

XD33-S3X	Standard housing, black 0...1 V, -40...60 °C, UART
XD33-W3X	Standard housing, white 0...1 V, -40...60 °C, UART

### Industrial versions

XD33-SC12D6	Industrial housing, 2 m cable 0...1 V, 0...150 °C, UART
XD33-SC15D6	Industrial housing, 5 m cable 0...1 V, 0...150 °C, UART

### Other configurations on request

Analog output	0...1 / 5 / 10 V, 0 / 4...20 mA
Interface	UART or RS-485
Scale	Freely scalable

### Typical accessories

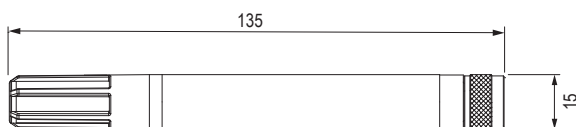
XD-AC3001	Service cable to PC
E2-02XX	Extension cable with open ends, 2 m long, black
E3-02XX	Extension cable with open ends, 2 m long, white
HW4	HW4 software for adjustment of the probe
NSP-PCB-PE40	Polyethylene filter, gray
SP-S15	Steel sinter filter (ind. probe)
ER-15	Calibration device
EAXx-SCS	Humidity standards (xx = %RH)

### Note:

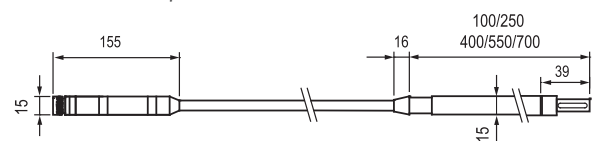
The XD probe is **NOT** compatible with ROTRONIC transmitters, data loggers, handheld instruments and active cables.

### Dimensions

Standard probe



Industrial probe



	Standard probe	Industrial probe
<b>General specifications</b>		
Device type	Humidity / Temperature probe	
Range of application measurement probe	-40...85 °C / 0...100 %RH	-100...200 °C* / 0...100 %RH *Short-term peak load
Accuracy at 23 °C, ± 5 K	0.8 %RH / 0.2 K @ 5...24 VDC Adjusted at 23 °C and 10, 35, 80 %RH @ 5 VDC	
Outputs	Analog (voltage / current), digital (UART / RS-485)	
Power supply	5...16 VAC / 5...24 VDC (0...1 V) 12...16 VAC / 16...24 VDC (all kind of output signals)	
IP protection	IP65	
<b>Technical information</b>		
Current consumption	7 mA (typical) @ 24 VDC, 0...10 V 12 mA (typical) @ 5 VDC, 0...1 V	
Range of application electronics	-40...85 °C / 0...100 %RH	
<b>Functions</b>		
Psychrometric calculations	Dew point / Frost point	
Adjustment via software	Single point, multipoint, dew point (%RH / °C), with service cable	
<b>Probe</b>		
Filter	Polyethylene, 20 µm	No filter ex works
Filter carrier	Polycarbonate	Brass, nickel-plated
Maximum wind velocity	20 m/s, with polyethylene filter	3 m/s, without filter
Length of extension cable	2 m / 5 m	
Maintenance / Calibration	Annual calibration (recommended)	
Humidity sensor	ROTRONIC HYGROMER® IN-1	
Temperature sensor	Pt100 1/3 Class B	
Analog output	0...1 / 5 / 10 V	0...1 / 5 / 10 V 0 / 4...20 mA
Digital output	UART or RS-485	
Analog output	Accuracy at 23 °C, < 1 mV (1 V) / <10 mV (10 V) / <20 µA	
Response time τ63	<15 s	
Long-term stability, humidity sensor	<1 %RH / year	
<b>Conformities / Housing</b>		
CE / EMC compatibility	CE conformant 2007/108/EG	
FDA / GAMP conformity	21 CFR Part 11 / GAMP 5	
Housing material	Polycarbonate	PEEK
<b>Dimensions probe head</b>		
Diameter	Ø 15 mm	
Length	135 mm	100 mm / 250 mm 400 mm / 550 mm / 700 mm
Sensor cable	-	2 m / 5 m

Opt immediately for the HygroClip 2 with integrated AirChip3000 for your temperature and humidity measurements. You can find detailed information on our probes at [www.rotronic.com](http://www.rotronic.com). We will also be glad to advise you on the telephone or in our showroom.

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MEASUREMENT SOLUTIONS

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