

ZH

- HUMIDITY AND TEMPERATURE TRANSMITTER
- CAPACITIVE SENSOR + CONVERTER

**FEATURES**

SENSOR	ZH 10-	ZH 20-
PART NO. DETAILS	ZH HC2-S (SENSOR)+ AZH HF5 (CONVERTER)	ZH HC2IC (SENSOR) + AZH HF5 (CONVERTER) + AZH SP (FILTER)
Range	-50... 100°C / 0...100% RH	-100... 200°C / 0...100% RH
Accuracy	±0.8% RH, ±0.1K at 23°C ±5K	
OUTPUTS		
Analog outputs	Digital interface (UART) and scalable analog outputs, 0... 1 V	
Output configuration	0... 1V = -40... 60°C/ 0... 100% RH	
Calibration	At 23°C and 10, 35, 80 % RH	
GENERAL		
Power supply	3.2...5 VDC, calibrated at 3.3 VDC	3.3 VDC ±0.1 VDC
Power consumption	4.5 mA approx.	
Sensor Type	HYGROMER® IN-1 ROTRONIC, Pt100 Class A	
Filter Type	Polyethylene, 20 pm, gray colour	Metal mesh (CODE AZH SPM15)
Response time	< 15 s, without filter	
MECHANICAL		
Case dimensions	Ø 15 x 83 mm	Ø 15 x (100, 250, 400, 550, 700) mm or Ø 15/25 x (250, 400, 550, 700) mm
Case material	Polycarbonate	PEEK, brass nickel plated
Weight	10g	230... 380 g

CONVERTER		AZH HF5	
PART NO. DETAILS	HF520 (2 WIRES)	HF53/4 (3/4 WIRES)	HF56X (3/4 WIRES HIGH CURRENT)
Communication interface	UART		
Analog outputs	2 x 4... 20 mA	2 x 0/4... 20 mA or 0... 1/5/10 V	
Digital output: RS485	n.a.	RS485 and analogue	
Digital output: USB	n.a.	USB, RS485 and analogue	
Digital output: Ethernet	n.a.	Ethernet RJ45, RS485 and analogue	
Digital output: Wireless	n.a.	Wireless, RS485 and analogue	
GENERAL			
Power supply	10... 28 VDC	15...40 VDC/12... 28 VDC gal. sep. 9... 36 VDC/7... 24 VAC	85... 240 VAC
Power consumption	2 x 20 mA max.	270 mA max.	30 mA max.
Humidity sensor type	HYGROMER® IN-1 ROTRONIC, Pt100 Classe A		
Humidity operating range	0... 100% RH		
Humidity accuracy	±0.8% RH ±5K		
temperature sensor type	Pt100 Class A		
Temperature operating range	-50... 100°C/-48... 212°F		
Temperature accuracy	±0.1K a 23°C ±5K		
MECHANICAL			
Case dimensions	129 x 72 mm, depth 45 mm	192 x 102 mm, depth 52 mm	129 x 72 mm, depth 45 mm
Case material	ABS		
Protection degree	IP65 (USB or Ethernet model: IP40)		
Weight	220 g		500 g

HOW TO ORDER

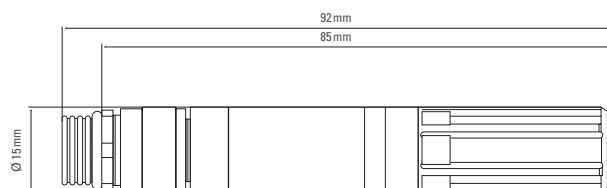
CODE	PROBE + CONVERTER DESCRIPTION	
ZH 10	ZH HC2-S	Humidity + temperature probe - Wall mounting - $\varnothing 15 \times 83$ mm -50... +100°C / 0... +100 % RH - Power supply 3.2... 5 VDC
	AZH HF5 (xx)	Converter

CODE	PROBE + CONVERTER + FILTER DESCRIPTION	
ZH 20	ZH HC2IC (*) (xx)	Humidity + temperature probe - Wall mounting -30... +70°C Out 4... 20 mA 2 wires Power supply 3.3 VDC (*) see table below for details about dimensions (xx) = cable lenght
	AZH HF5 (xx)	Converter
	AZH SPM15	Filter

ZH 20	CODE
ZH HC2IC (*) (xx) - DIMENSIONS	
$\varnothing 15 \times 100$ mm	1
$\varnothing 15 \times 250$ mm	3
$\varnothing 15 \times 400$ mm	4
$\varnothing 15 \times 500$ mm	5
$\varnothing 15 \times 700$ mm	7
CABLE (XX)	
To be specified in meters (02, 05, etc...)	XX

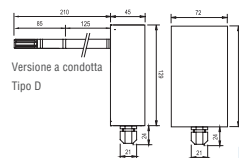
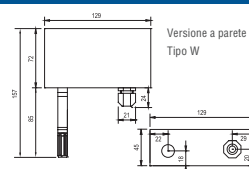
DIMENSIONS

SENSOR



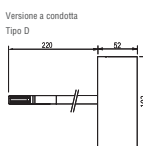
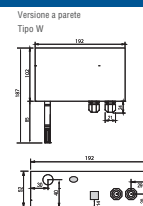
Dimensions are expressed in mm

ZH 10



Dimensions are expressed in mm

ZH 20



Dimensions are expressed in mm