

# Temperature/humidity - transmitters

Type 5616.xx measurement transmitters stand for multi-functionality, highest accuracy and simple installation and maintenance. The new housing complies with Protection Class IP65 and consists of 3 modules:

- the base with the connections
- the middle section with the electronics and sensor unit
- the cover with optional viewing window for the display

The 3-part housing facilitates simple installation and fast exchange of the sensor unit for service purposes. The model with remote sensor is designed for measurements from -40...120°C.

Excellent long-term stability. Smallest hysteresis. Excellent resistance to chemical attack.

Field calibration is very easy to carry out, with the aid of two keys, at two freely selectable humidity points. On-site calibration of the entire measurement chain is also possible, in accordance with FDA directives.

Technical data	Ref.No.
<b>Transmitter 4...20mA</b>	<b>5616.00</b>
<b>Measurement transducer 4...20mA without display</b>	<b>5616.10</b>
<b>Transmitter 4...20mA</b>	<b>5616.20</b>
<b>Measurement transducer 4...20mA without display</b>	<b>5616.30</b>
Cable length	<b>5616.20, 5616.30:</b> 2m
Construction	Plastic housing (ABS)
Dimensions	90x66,5x135mm
Display	<b>5616.20, 5616.00:</b> no / <b>5616.10, 5616.30:</b> yes
Filter	<b>5616.20, 5616.30:</b> stainless steel sinter filter <b>5616.00, 5616.10:</b> steel wire canvas
Measurement sensor application range	<b>5616.00:</b> -40...60°C
Mounting	<b>5616.20, 5616.30:</b> remote / <b>5616.00, 5616.10:</b> Wall
Operating temperature electronics	-40...60°C
Operating temperature sensor	<b>5616.20, 5616.30:</b> -40...120°C <b>5616.10:</b> -40...60°C
Operating temperature with display	<b>5616.10, 5616.30:</b> -30...60°C
output signal	<b>5616.20, 5616.30:</b> 4...20mA / 0...20mA / 0...10V / 0...5V = 0...100% RH = -40...120°C <b>5616.00:</b> 4...20mA = 0...100% RH = -40...60°C <b>5616.10:</b> 4...20mA / 0...20mA / 0...10V / 0...5V = 0...100% RH = -40...60°C
Power supply for 0-5V output	
And for 0-10V, 0-20mA and 4-20mA	10.5...28VDC or 12...28VAC 15...28VDC/VAC
Protection type	IP65
Sensor length	<b>5616.20, 5616.30:</b> 200mm / <b>5616.00, 5616.10:</b> 40mm
Storage temperature	-40...60°C
<b>Relative humidity</b>	
Principle	Capacitive
Measuring range	0 ... 100 % RH
Accuracy	at 20°C incl. hysteresis: ±2% (0...90%), ±3% (90...100%) RH
<b>Temperature</b>	
Principle	Pt1000 A, DIN EN 60751
Measuring range	<b>5616.00, 5616.10:</b> -40 ... 60 °C <b>5616.20, 5616.30:</b> -40 ... 120 °C
Accuracy	±0.2°C (at 20°C)



For wall-mounting or duct installation  
For demanding applications  
Sensor technology gives long-term stability  
With and without display