

AT/RH SENSOR

5600-0316



STATE OF THE ART ASIC TECHNOLOGY WITH A ROBUST PLUG-IN



FEATURES

- 100% interchangeable to reduce maintenance costs and eliminate downtime
- Digital and analog interface
- ROTRONIC Humidity Sensor (0...100% rh)
- Accuracy $\pm 1.5\%$ RH and ± 0.2 K
NOTE: In order to achieve "Accuracy of $\pm 0.1^\circ\text{C}$ ", it is necessary to perform "individual sensor calibration with matched transfer function".
- Temperature sensor Pt100 1/5 DIN
- Long Term Stability $<1\%$ rh/year
- Sensor module can be replaced in seconds without any loss of accuracy and without calibration
- Measuring Range - 0...100% rh and $-40\dots+85^\circ\text{C}$ ($-40\dots+185^\circ\text{F}$)

ORDERING

5600-0316-1

Temperature/Relative Humidity Sensor with 3 Meters of Cable (no connector included - tinned pig tail ends) Includes MOK3-05-XX.

5100-0021

Radiation shield, AT/RH for 5600-0316-1 (not shown)

SPECIFICATIONS

Power Supply	3.5...50VDC
Current Consumption	<4mA
MEASURING RANGE	
Humidity	0...100% rh
Temperature	$-40\dots+85^\circ\text{C}$
	$-40\dots+185^\circ\text{F}$
OPERATING RANGE	
Temperature	$-40\dots+85^\circ\text{C}$
	$-40\dots+185^\circ\text{F}$
ACCURACY	
Humidity	$\pm 1.5\%$ RH
Temperature	$\pm 0.2^\circ\text{C}$
Special calibration available upon request	
OUTPUT SIGNAL	
Analog	0...1/00% rh = 0...1V $-40\dots+85^\circ\text{C}=0\dots+1.25\text{V}$ (HygroClip S3, white)
Digital	one wire
Sampling Time	<0.7s (minimum excitation time 3s)
RESOLUTION	
Humidity	100% rh/12 bit analog 16 bit digital, 1%
Temperature	250°C /12 bit analog 16 bit digital, $\pm 0.1^\circ\text{C}$
CALIBRATION SENSOR	
PC (data in EE-Prom) 16 bit digital	
Humidity	HYGROMER-C94
Temperature	Pt100 1/5 DIN
Analog Output Load	>10k Ohm
Maximum Cable Length	5m (1/5 ft.) with amplifier up to 100m (300 ft.)
Sensor Protection	Wire filter (20 m/s)
DIMENSIONS	
Total Length	100mm
Diameter	-1.5mm (0.59 in)
Connection Type	Bayonet cap on mounting connector
Protection Grade	IP65
Material Color	Polycarbonate, white
EMC Compatibility (CE)	EN50081-2, EN50082-2