

AT/RH SENSOR - LOW POWER 5600-0312



COMBINED HUMIDITY AND
TEMPERATURE SENSOR PRIMARILY
FOR OUTDOOR APPLICATIONS



FEATURES

- Power consumption of 4mA at 12VDC
- Well suited for outdoors, a very high resistance sensitivity, solid state construction
- Under five seconds response, essentially linear with small hysteresis, negligible temperature dependence
- Relative humidity sensor based on thin film capacitor change (One micron thick dielectric polymer layer absorbs water molecules through thin metal electrode - capacitance change proportional to relative humidity)
- Precision, extended range thermistor device accurately measures ambient air temperature.
- Thermistor produces relatively large resistance change per degree of temperature change, using normal signal voltages (no self-heating)
- Precise analog voltage output proportional to ambient air temperature

ORDERING

5600-0312	Temperature/Relative Humidity Sensor, Low Power with 23.1k Ω 0.01% resistor
6411-1243	Cable assy for 5600-0312, specify length
Accessories	
5600-0021-3	Radiation Shield, for 5600-0312

SPECIFICATIONS

Specifications subject to change without notice

HUMIDITY

Sensor Element	Thin film capacitor	
Range	0 to 100% RH	
Output	0 to 1VDC (linear)	
Accuracy	0 - 10%	$\pm 3\%$
	10 - 90%	$\pm 2\%$
	90 - 100%	$\pm 3\%$
Response Time	<15 seconds @ 20°C of final (with filter)	

Power Supply 4mA at 12VDC

TEMPERATURE

Sensor Element	Thermistor
Range	-50°C to +50°C
Accuracy	$\pm 0.1^\circ\text{C}$
Response Time	10 seconds in still air

PHYSICAL

Diameter	0.75 in.
Length	7.5 in.
Weight	2.5 oz

SUTRON