



Air Temperature and Relative Humidity

Typically capacitive RH chips and PRTs





Rugged, Reliable, and Ready for any Application



Air temperature and relative humidity probes typically consist of two separate sensors packaged in the same housing. Often relative humidity is measured with a capacitive RH chip, while air temperature is measured by a PRT. The HMP155A, EE181, or CS215 is recommended

in humid areas or applications in which accurate measurements of RH (especially above the 90% RH level) are important. Solar radiation shields are required for most applications, where the probes are exposed to sunlight.

MAJOR SPECIFICATIONS

	Sensor	Measurement Range	Accuracy	Field Replacable Chip or Recalibrate
<p>CS215 SDI-12 Output Competitively priced, general purpose temperature and RH sensor</p> 	Sensirion SHT75	<p>Relative Humidity 0 to 100% RH</p> <p>Temperature -40° to +70°C</p>	<p>Relative Humidity (at 25°C) ±2% to ±4%, depending on RH</p> <p>Temperature ±0.3°C at 25°C; ±0.4°C (+5° to +40°C); ±0.9°C (-40° to +70°C)</p>	field-replaceable chip
<p>HMP60 Accurate and Rugged Ideal for long-term, unattended applications</p> 	<p>Relative Humidity Vaisala's INTERCAP capacitive chip</p> <p>Temperature PT100 RTD</p>	<p>Relative Humidity 0 to 100% RH</p> <p>Temperature -40° to +60°C</p>	<p>Relative Humidity ±3% to ±7% depending on RH and temperature</p> <p>Temperature ±0.6°C</p>	field-replaceable chip (RH only)
<p>EE181 Accurate and Rugged Coating on RH element protects it from contaminants</p> 	<p>Relative Humidity E+E Elektronik HC101</p> <p>Temperature PT100 RTD</p>	<p>Relative Humidity 0 to 100% RH</p> <p>Temperature -40° to +60°C</p>	<p>Relative Humidity ± (1.5 + 1.5%*mV) % RH (-40° to +60°C)</p> <p>Temperature ±0.2°C to ±0.5°C depending on temperature</p>	recalibrate
<p>HMP155A Accurate, Wide Temperature Range Higher end sensor where higher accuracy is required</p> 	<p>Relative Humidity HUMICAP® 180R</p> <p>Temperature PT100 RTD</p>	<p>Relative Humidity 0.8 to 100% RH</p> <p>Temperature -80° to +60°C</p>	<p>Relative Humidity ±1% to ±1.7% depending on RH</p> <p>Temperature ±(0.055 - 0.0057 x temperature)°C</p>	recalibrate

