



AIR TEMPERATURE & 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, HC2S3 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
CS215 SDI-12 Output Competitively priced, general purpose temperature and RH sensor	Sensirion SHT75	<u>Relative Humidity</u> 0 to 100% RH <u>Temperature</u> -40° to +70°C	<u>Relative Humidity (at 25°C)</u> ±2% to ±4%, depending on RH <u>Temperature</u> ±0.3°C at 25°C; ±0.4°C (+5° to +40°C); ±0.9°C (-40° to +70°C)	field replaceable chip
HMP60 Accurate, Rugged Ideal for long-term, unattended applications	<u>Relative Humidity</u> Vaisala's INTERCAP capacitive chip <u>Temperature</u> PT100 RTD	<u>Relative Humidity</u> 0 to 100% RH <u>Temperature</u> -40° to +60°C	<u>Relative Humidity</u> ±3% to ±7% depending on RH <u>Temperature</u> ±0.6°C	field replaceable chip (RH only)
HC2S3 Accurate and Rugged Superior performance and reliability	<u>Relative Humidity</u> ROTRONIC® Hygromer IN-1 <u>Temperature</u> PT100 RTD	<u>Relative Humidity</u> 0 to 100% RH <u>Temperature</u> -40° to +60°C	<u>Relative Humidity</u> ±0.8% RH with standard configuration settings <u>Temperature</u> ±0.1°C with standard configuration settings	recalibrate
HMP155A Accurate, Wide Temperature Range Higher end sensor where higher accuracy is required	<u>Relative Humidity</u> HUMICAP® 180R <u>Temperature</u> PT100 RTD	<u>Relative Humidity</u> 0.8 to 100% RH <u>Temperature</u> -80° to +60°C	<u>Relative Humidity</u> ±1% to ±1.7% depending on RH <u>Temperature</u> ±(0.055 - 0.0057 x temperature)°C	recalibrate
083E Commonly used with the WMS100 for wind-farm power performance measurements	<u>Relative Humidity</u> Thin film polymer capacitor <u>Temperature</u> Thermistor (precision multi-element)	<u>Relative Humidity</u> 0 to 100% RH <u>Temperature</u> -50° to +50°C	<u>Relative Humidity</u> ±2.0% <u>Temperature</u> ±0.10°C (0.18°C)	recalibrate

