Relative Humidity Sensor

Item Number: 4415

Description	
Sensor type	polymer resistor humidity sensor
Applications	- wind resource assessment - meteorological studies - environmental monitoring
Sensor range	0 to 100% relative humidity
Instrument compatibility	Symphonie with RH5 SCM + any iPack

Output signal	
Signal type	linear analog voltage

Transfer function	% Relative Humidity = Voltage x 20
Accuracy	• +/- 2% RH from 10% to 90% RH @ 25°C (77°F) • +/- 3% RH from 5% to 10% RH and 90% to 95% RH@ 25°C (77°F) • Contact Technical Support for information on additional uncertainty due to temperature effects.
Output signal range	0 to 5V for 0 to 100% RH, with a load resistance greater than 10 k ohms

Power requirements	
Supply voltage	10 V to 30 V DC, 12 V at 2.6 mA typical

Installation	
Mounting	uses a sheet metal bracket with a hose clamp, to be mounted to the tower, under the shelter box
Tools required	8 mm (5/16 inch) nut driver or wrench

Environmental	
Operating temperature range	-40°C to 70°C (-40°F to 158°F)
Operating humidity range	0 to 100% relative humidity

Physical	
Connections	wire leads, 3 conductor shielded cable: • Red: Power • Black:Ground • White: Signal out
Cable length	1.5 m (5 feet)

Weight	0.62 kg (1.36 pounds)

Dimensions	110 mm (4.3 inches) x 109 mm (4.3 inches) x 50 mm (2.0 inches) enclosure dimensions, without the bracket or shroud

Materials	
Cable	3 conductor 22 AWG, with overall foil shield and drain wire, chrome PVC jacket
Enclosure	polystyrene plastic box with galvanized steel mounting bracket

Symphonie SCM Card for RH5 or RH5X
Item Number: 3156

Description	
Accessory type	signal conditioning module Signal conditioning module
Instrument compatibility	Symphonie NRG logger
Sensor compatibility - analog channels	for (1) NRG #RH5 relative humidity sensor
Functions	• provides input channel electronics for adding a NRG #RH5 relative humidity sensor • provides power from iPack to the RH-5

Power requirements	
Other	from any Symphonie logger equipped with an iPack and PV

Physical	
Connections	installs in Analog 9, Analog 10, Analog 11, Analog 12 SCM slot
Dimensions	41 mm x 27 mm 5 mm (1.6 inches x1.07 inches x 0.2 inches)