

# HMP50

## Temperature and Relative Humidity Probe

The HMP50, manufactured by Vaisala, measures air temperature with a 1000 ohm platinum resistance thermometer (PRT), and RH with the INTERCAP® capacitive chip. The chip is field-replaceable, as needed, and eliminates the downtime typically required for the recalibration process.

### Sensor Mounts

When exposed to sunlight, the HMP50 must be housed in a 41303-5A 6-plate radiation shield. To attach the radiation shield directly to a tripod mast, tower mast, or tower leg, place the u-bolt in the side holes. To attach the 41303-5A to a CM202, CM204, or CM206 crossarm, place the 41303-5A's u-bolt in the bottom holes.



### Ordering Information

#### Air Temperature and Relative Humidity Probe

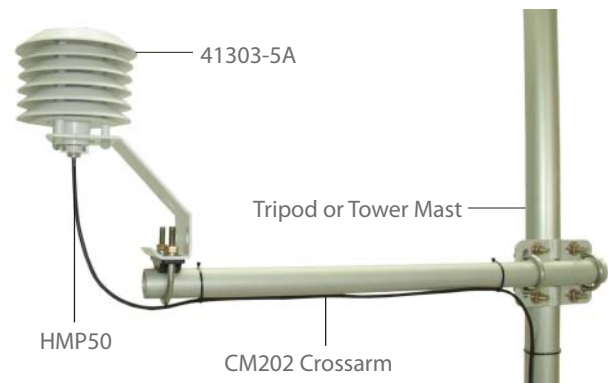
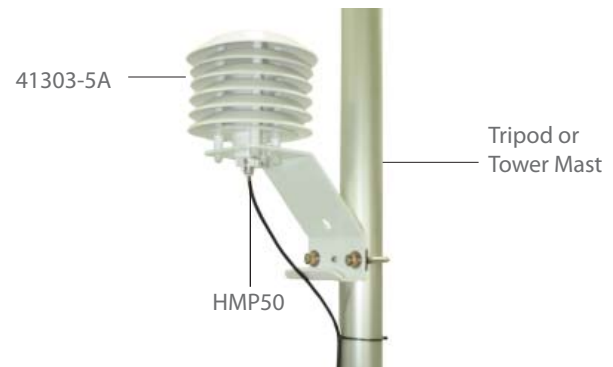
**HMP50-L** Vaisala Temperature/RH Probe with user-specified cable length. Enter cable length, in feet, after the -L. Must choose a cable termination option (see below).

#### Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in connector for attachment to a prewired enclosure.

#### Accessories and Replacement Parts

- 41303-5A** 6-Plate Gill Radiation Shield to house the HMP50
- 9598** Replacement chip for the HMP50.



### Recommended Cable Lengths

2 m Height		Atop a tripod or tower via a 2 ft crossarm such as the CM202							
Mast/Leg	CM202	CM6	CM10	CM110	CM115	CM120	UT10	UT20	UT30
9 ft	11 ft	11 ft	14 ft	14 ft	19 ft	24 ft	14 ft	24 ft	37 ft

*Note: Add two feet to the cable length if you are mounting the enclosure on the leg base of a light-weight tripod.*

## Specifications

**Supply Voltage:** 7 to 28 Vdc (typically powered by datalogger's 12 V supply)

**Current Consumption:** 2 mA typical

**Dimensions**

**Diameter:** 0.47 inch (1.2 cm)

**Length:** 2.8 inch (7.1 cm)

**Weight (w/ 6 ft cable):** 0.1 lbs (0.05 kg)

**Housing Material:** chrome-coated aluminum and chrome-coated ABS plastic

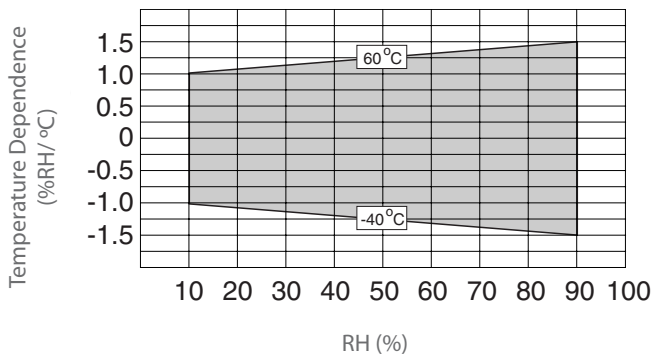
### Relative Humidity (RH)

**Sensor:** Vaisala's INTERCAP capacitive chip

**Measurement Range:** 0 to 98% RH, non-condensing

**Accuracy:** ±3%, 0 to 90% range;  
±5%, 90 to 98% range

#### Temperature Dependence of RH Measurement:



### Air Temperature

**Temperature Sensor:** 1000 ohm Platinum Resistance Thermometer

**Measurement Range:** -40° to +60°C

#### Temperature Accuracy:

