

Air Temperature and Relative Humidity Sensor



Accurate, Rugged

Ideal for long-term, unattended applications

Overview

The HMP60, manufactured by Vaisala, probe measures air temperature for the range of -40° to +60°C, and relative humidity for the range of 0 to 100% RH. It uses the INTERCAP®

capacitive RH chip. This field-replaceable chip eliminates the downtime typically required for the recalibration process.

Benefits and Features

▶ Field-replaceable humidity chip eliminates recalibration downtime

- Compatible with most Campbell Scientific dataloggers
- Can be mounted to a tower/tripod mast or crossarm

Specifications

Supply Voltage	5 to 28 Vdc (typically powered by datalogger's 12 V supply)
Current Consumption	1 mA (typical)5 mA (maximum)
Filter Description	0.2 μm Teflon membrane
Settling Time	1 s
Housing Classification	IP65
Housing Material	AISI 316 stainless steel
Filter Cap Material	Chrome-coated ABS plastic
Field-Replaceable Chip or Recalibrate	Field-replaceable chip (RH only)
Sensor Diameter	1.2 cm (0.5 in.)
Filter Diameter	1.2 cm (0.5 in.)

Length	7.1 cm (2.8 in.)
Weight	0.05 kg (0.1 lb) with 1.83 m (6 ft) cable

Relative Humidity	
Sensing Element	Vaisala's INTERCAP capacitive chip
Measurement Range	0 to 100% RH (non-condensing)
Typical Accuracy at -40° to 0°C	±5% (0 to 90% RH)±7% (90 to 100% RH)
Typical Accuracy at 0° to 40℃	±3% (0 to 90% RH)±5% (90 to 100% RH)
Typical Accuracy at 40° to 60℃	±7% (90 to 100% RH)±5% (0 to 90% RH)



Air Temperature		Measurement Range	-40° to +60°C
Sensing Element	1000 ohm Platinum Resistance Thermometer (PRT)	Accuracy	±0.6°C