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

<table>
<thead>
<tr>
<th>Air Temperature and Relative Humidity Probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMP50-L</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>2 m Height</th>
<th>Atop a tripod or tower via a 2 ft crossarm such as the CM202</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mast/Leg</td>
<td>CM202</td>
</tr>
<tr>
<td>9 ft</td>
<td>11 ft</td>
</tr>
</tbody>
</table>

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:

![Graph showing temperature dependence of RH measurement](image)