Temperature and Relative Humidity Probe
Model CS500

The CS500 is a modified version of Vaisala's 50Y Humitter. The CS500 measures air temperature with a 1000 ohm platinum resistance thermometer (PRT); RH is measured by a laser-trimmed INTERCAP capacitive chip. The chip is field-replaceable, as needed, and eliminates the downtime typically required for the recalibration process.
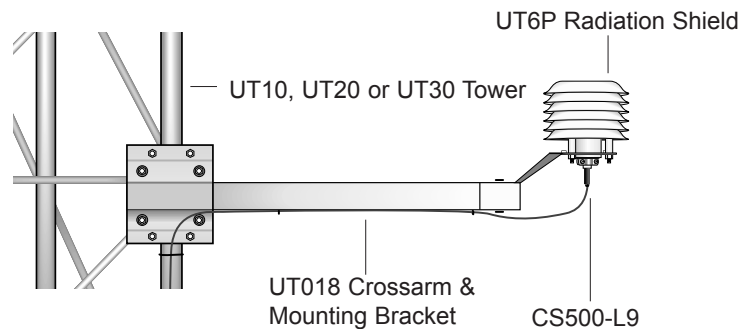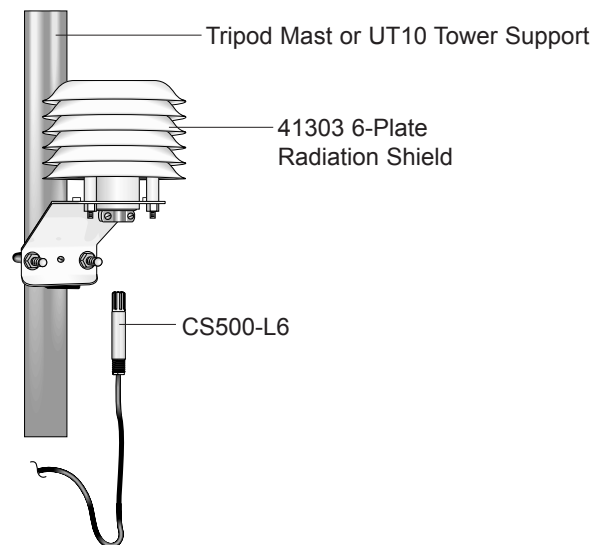
Sensor Mounts

When exposed to sunlight, the CS500 must be housed in a radiation shield. If the CS500 is mounted to a CM6/CM10 tripod or a UT10 tower, a model 41303 6-plate radiation shield is used. If the CS500 is mounted on a UT20 or UT30 tower, a UT018 Crossarm and Mounting Bracket and a UT6P 6-plate radiation shield are used.

Ordering Information

CS500-L6   6 ft lead length for use with CM6/CM10 tripods or a UT10 tower.

CS500-L9   9 ft lead length for use with a UT10, UT20 or UT30 tower and a UT018

9598   Replacement chip for the CS500.

UT018   Crossarm and Mounting Bracket; required for mounting the CS500 to a UT20 or UT30 tower

Tripod Mast or UT10 Tower Support

41303 6-Plate Radiation Shield

CS500-L6

UT6P Radiation Shield

UT10, UT20 or UT30 Tower

UT018 Crossarm & Mounting Bracket
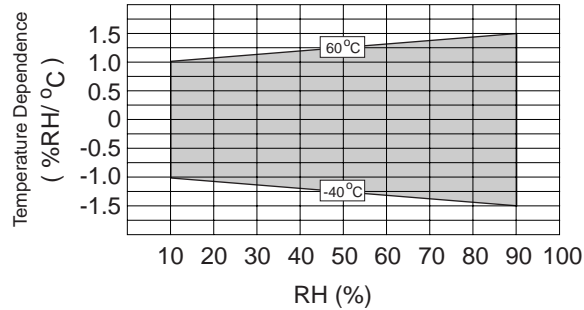
CS500-L9

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Specifications

Relative Humidity

Operating Range: 0 to 100% RH

Accuracy: 0-10% range: unspecified
10-90% range: ±3.0%
90-100% range: ±6.0%
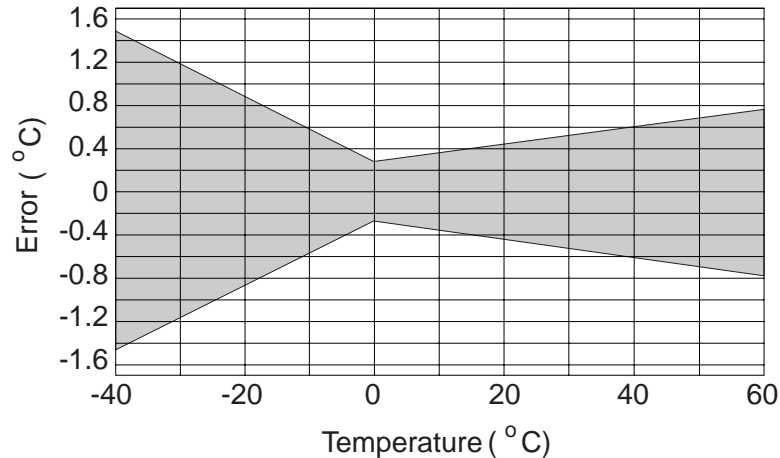
Temperature Dependence of Relative Humidity Measurement:

Typical Long-Term Stability: Better than ±1% RH per year

Temperature

Measurement Range: -40° to +60°C

Temperature Accuracy:

General

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

Current Consumption: < 2 mA typical

Diameter: 0.47" (12 mm)

Length: 2.66" (67.5 mm)

Housing Material: ABS plastic

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