

# 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.

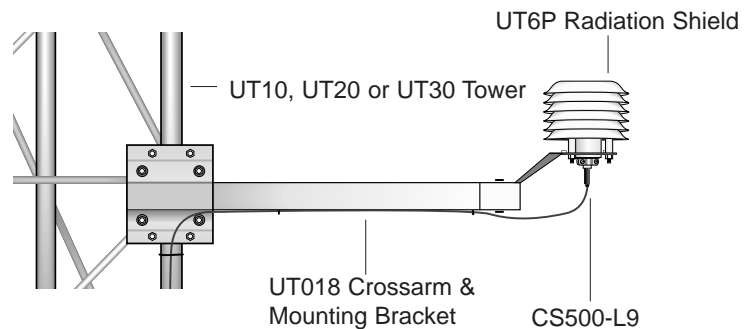
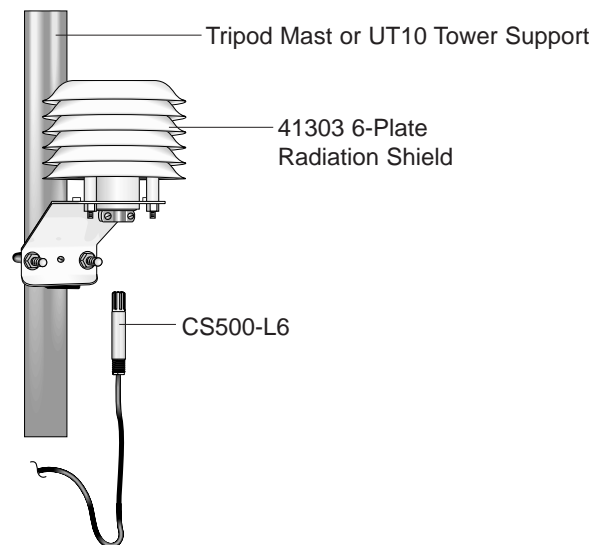
### Sensor Mounts

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



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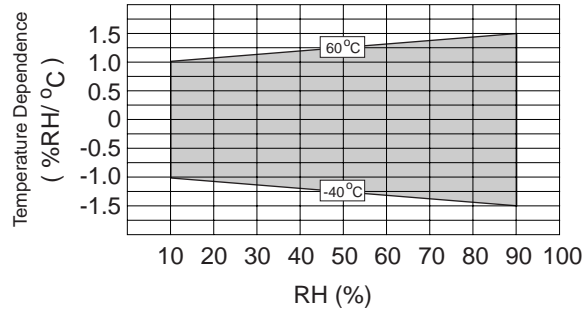
## Specifications

### Relative Humidity

Operating Range: 0 to 100% RH

Accuracy: 0-10% range: unspecified  
10-90% range:  $\pm 3.0\%$   
90-100% range:  $\pm 6.0\%$

Temperature Dependence of Relative Humidity Measurement:

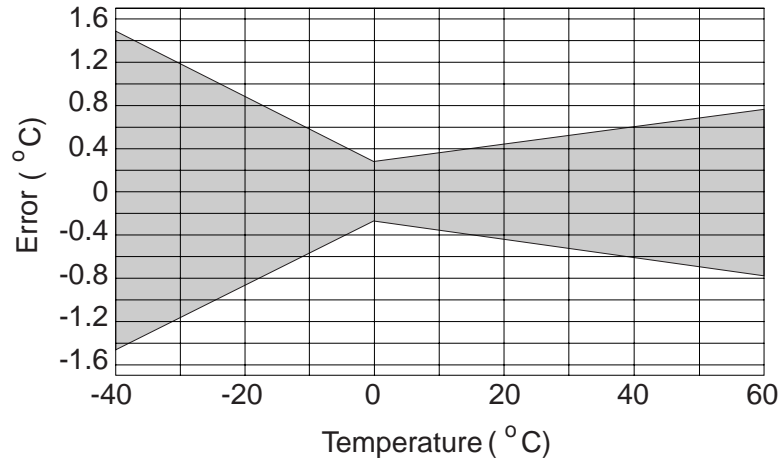


Typical Long-Term Stability: Better than  $\pm 1\%$  RH per year

### Temperature

Measurement Range:  $-40^{\circ}$  to  $+60^{\circ}\text{C}$

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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