

Temperature and Relative Humidity Probe Model CS215

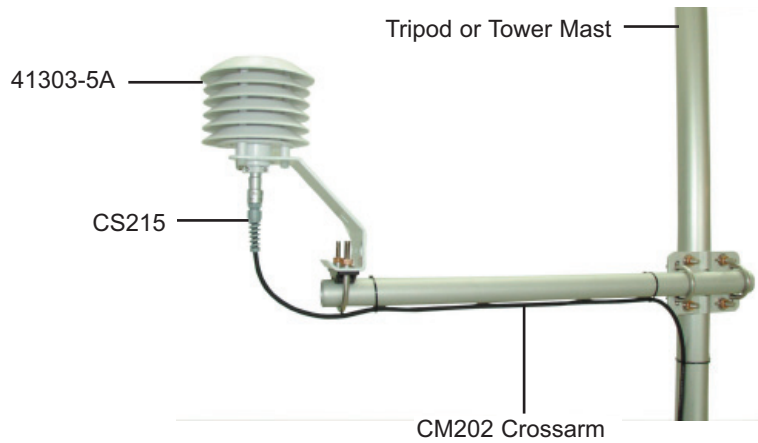
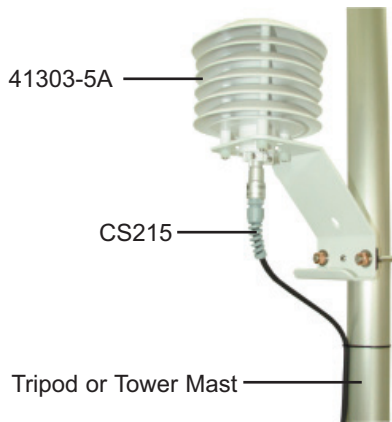
The CS215 uses the Sensirion SHT75, a combined relative humidity and temperature element, to provide accurate, stable measurements. The probe outputs an SDI-12 signal that our dataloggers can directly measure. Please note that our CR7 and CR9000X dataloggers are not SDI-12 compatible.



The Sensirion SHT75 element is field-replaceable, eliminating the downtime typically required for the recalibration process.

Sensor Mounts

When exposed to sunlight, the CS215 must be housed in a 41303-5A radiation shield. To attach the 41303-5A to a CM202, CM204, or CM206 crossarm, place the 41303-5A's u-bolt in the bottom holes. To attach the radiation shield directly to a tripod mast, tower mast, or tower leg, place the u-bolt in the side holes.



Ordering Information

CS215-L Temperature & RH Probe with user-specified lead length. Enter lead length, in feet, after the L. For example, a CS215-L9 orders a probe with a 9 foot lead length.

41303-5A 6-Plate Gill Radiation Shield to house the CS215.

Recommended Lead 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' | 11' | 11' | 14' | 14' | 19' | 24' | 14' | 24' | 37' |

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

Specifications

Relative Humidity

Measurement Range: 0 to 100% RH (-20° to +60°C)

Accuracy (at 25°C): ±2.0% (10-90% range), ±4.0% (0-100% range)

Temperature Dependence: better than ±2.0% over -20° to +60°C

Short-Term Hysteresis: <1.0% RH

Typical Long-Term Stability: better than ±1.0% RH per year

Response Time with Filter: <10 s (63% response time in air moving at 1 m s⁻¹)

Temperature

Measurement Range: -40° to +70°C

Accuracy: ±0.4°C (+5° to +40°C), ±0.9°C (-40° to +70°C)

Response Time with Filter: 120 s (63% response time in air moving at 1 m s⁻¹)

Output Resolution: 0.1°C

General

Supply Voltage: 6-16 Vdc (typically powered by datalogger's 12 V supply)

Typical Current Consumption: 70 µA quiescent, 1.7 mA during measurement (takes 0.7 s)

EMC Compliance: tested and conforms to BS EN61326:2002

Communication Standard: SDI-12 V1.3 (responds to a subset of commands)

Operating Temperature: -40° to +70°C

Weight: 5.3 oz (w/10 ft cable); 150 g (w/3 m cable)

Diameter: 0.5" (1.2 cm) at sensor tip, 0.7" (1.8 cm) at cable end

Length: 7.1" (18.0 cm) including cable strain relief

Housing Material: anodized aluminum

Cable Type: low-temperature cable with Santoprene outer jacket

