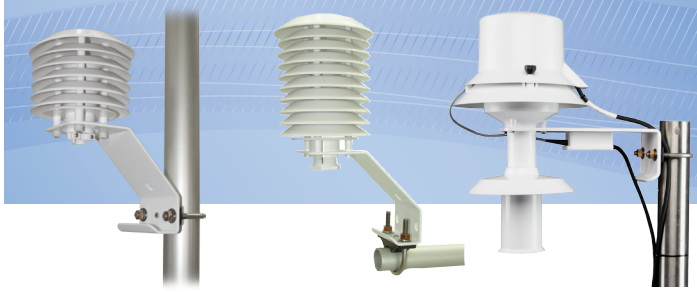
CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

Solar Radiation Shields

For Temperature and Temperature/Relative Humidity Sensors



Rugged, Reliable, and Ready for any Application

RELIABLE SINCE 1974 MONITORING

Campbell Scientific offers several solar radiation shields that house one temperature or temperature/relative humidity probe. These solar radiation shields are white to reflect solar radiation. Both naturally-aspirated and fan-aspirated solar radiation shields are available.

The naturally aspirated shields have a louvered construction that allows air to pass freely through the shield, thereby keeping the probe at or near ambient temperature.

Radiation shields that use a fan to draw air across a temperature sensor improve the accuracy of the air temperature measurements, but increase the power requirements of the system.

MAJOR SPECIFICATIONS

		Weight	Dimensions	Compatible Sensors[a]	Mounts to	Features
41303-5A | 6-Plate Naturally-Aspirated Radiation Shield		0.4 kg (0.9 lb)	plate diameter: 11.9 cm (4.7 in) height: 11.4 cm (4.5 in.)	107, 108, 109, CS215, HMP60	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Naturally shades and protects sensor
41303-5B | 6-Plate Naturally-Aspirated Radiation Shield with Band Clamp		0.4 kg (0.9 lb)	plate diameter: 11.9 cm (4.7 in) height: 11.4 cm (4.5 in)	107, 108, 109, CS215, HMP60	CM500-series poles or user-supplied with a (1.05 in) to 5.1 cm (2.4 in) OD	» Naturally shades and protects sensor
RAD06 | 6-Plate Naturally-Aspirated Radiation Shield with Double-Louvered Design		0.9 kg (1.9 lb)	plate diameter: 12.3 cm (4.8 in) height: 14.2 cm (5.6 in)	107, 108, 109, CS215, HMP60	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Improved sensor protection from driving rain, snow, insect intrusion » Lower self-heating
41003-5 | 10-Plate Naturally-Aspirated Radiation Shield		0.6 kg (1.3 lb)	plate diameter: 11.9 cm (4.7 in) height: 20.3 cm (8.0 in)	107[b], 108[b], 109[b], HMP60[c], CS215[c], HC2S3[d]	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Naturally shades and protects sensor

	Weight	Dimensions	Compatible Sensors[a]	Mounts to	Features
41003-5A | 10-Plate Naturally-Aspirated Radiation Shield with Band Clamp	0.6 kg (1.3 lb)	plate diameter: 11.9 cm (4.7 in) height: 20.3 cm (8.0 in)	107[b], 108[b], 109[b], HMP60[c], CS215[c], HC2S3[d]	CM500-series poles or user-supplied with a (1.05 in) to 5.1 cm (2.4 in) OD	» Naturally shades and protects sensor
RAD10 | 10-Plate Naturally-Aspirated Radiation Shield with Double-Louvered Design	1.0 kg (2.2 lb)	plate diameter: 12.3 cm (4.8 in) height: 20.8 cm (8.2 in)	107, 108, 109, HMP60, CS215, HC2S3	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Improved sensor protection from driving rain, snow, insect intrusion » Lower self-heating
41005-5 |14-Plate Naturally-Aspirated Radiation Shield Shades and protects sensor	~1 kg (~2 lb)	plate diameter: 11.9 cm (4.7 in)	HMP155A	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Naturally shades and protects sensor
RAD14 | 14-Plate Naturally-Aspirated Radiation Shield with Double-Louvered Design	1.1 kg (2.5 lb)	plate diameter: 12.3 cm (4.8 in) height: 27.4 cm (10.8 in)	HMP155A	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Improved sensor protection from driving rain, snow, insect intrusion » Lower self-heating
43502-L | Fan-Aspirated[e] Radiation Shield	1.1 kg (2.5 lb)	length: 33 cm (13 in) diameter: 20 cm (8 in)	43347 RTD probe or other sensors with up to 2.5 cm (0.9 in) diameter	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in) to 5.3 cm (2.1 in) OD	» Shades and draws ambient air past sensor for more accurate measurements

[a] Only currently-available sensors are listed. Refer to our website for compatibility with retired sensors.

[b] The 41322 adapter is required to install a 107, 108, or 109 probe in a 41003-5.

[c] For the HMP60 and CS215, the 41322 adapter can be used to mount the sensor in the lower part of the 41003-5. Alternatively, a 41381 extension tube and the 6637 hex plug can be used to mount the HMP60 or CS215 in a higher part of the shield; this configuration also requires the 18278 cable.

[d] The 43502 requires 12 to 14 Vdc. Its blower uses 500 mA.

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