



Solar Radiation Shields

For Temperature and Temperature/Relative Humidity Sensors

Rugged, Reliable, and Ready for any Application



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 Solar 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 Solar 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 Solar 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 pro- tection from driving rain, snow, insect intrusion » Lower self-heating
41003-5 10-Plate Naturally-Aspirated Solar 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 , 43347 ^d , EE181 ^e	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

More info: 435.227.9120

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	<i>Weight</i>	<i>Dimensions</i>	<i>Compatible Sensors^a</i>	<i>Mounts to</i>	<i>Features</i>
41003-5A 10-Plate Naturally-Aspirated Solar 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 , 43347 ^d , EE181 ^e	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 Solar 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)	HMP60, CS215, 083E, 43347	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
RAD10E 10-Plate Naturally-Aspirated Solar 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)	EE181, HMP60 ^f	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 Solar Radiation Shield 	~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 Solar 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 ^g Solar 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 or 41003-5A.

^c For the HMP60 and CS215, the 41322 adapter can be used to mount the sensor in the lower part of the 41003-5 or 41003-5A. 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 27251 hex plug is required to install a 43347 RTD in a 41003-5 or 41003-5A radiation shield.

^e The 28415 adapter is required to install an EE181 in a 41003-5 or 41003-5A radiation shield.

^f The 33560 extension tube is required to install an HMP60 in the RAD10E radiation shield.

^g The 43502 requires 12 to 14 Vdc. Its blower uses 500 mA.