



# 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

	<i>Weight</i>	<i>Dimensions</i>	<i>Compatible Sensors<sup>a</sup></i>	<i>Mounts to</i>	<i>Features</i>
<b>41303-5A</b>   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
<b>41303-5B</b>   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
<b>RAD06</b>   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 protection from driving rain, snow, insect intrusion » Lower self-heating
<b>41003-5</b>   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 <sup>b</sup> , 108 <sup>b</sup> , 109 <sup>b</sup> , HMP60 <sup>c</sup> , CS215 <sup>c</sup> , HC253 <sup>d</sup> , 43347 <sup>e</sup> , EE181 <sup>f</sup>	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

[campbellsci.com/solar-radiation-shields](http://campbellsci.com/solar-radiation-shields)



	<i>Weight</i>	<i>Dimensions</i>	<i>Compatible Sensors<sup>a</sup></i>	<i>Mounts to</i>	<i>Features</i>
<b>41003-5A</b>   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 <sup>b</sup> , 108 <sup>b</sup> , 109 <sup>b</sup> , HMP60 <sup>c</sup> , CS215 <sup>c</sup> , HC253 <sup>d</sup> , 43347 <sup>e</sup> , EE181 <sup>f</sup>	CM500-series poles or user-supplied with a (1.05 in) to 5.1 cm (2.4 in) OD	» Naturally shades and protects sensor
<b>RAD10</b>   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)	HC253, 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
<b>RAD10E</b>   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	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
<b>41005-5</b> 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
<b>RAD14</b>   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
<b>43502-L</b>   Fan-Aspirated <sup>g</sup> 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

<sup>a</sup> Only currently-available sensors are listed. Refer to our website for compatibility with retired sensors.

<sup>b</sup> The 41322 adapter is required to install a 107, 108, or 109 probe in a 41003-5 or 41003-5A.

<sup>c</sup> 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.

<sup>d</sup> The 27731 hex plug is required to install an HC253 in a 41003-5 or 41003-5A radiation shield.

<sup>e</sup> The 27251 hex plug is required to install a 43347 RTD in a 41003-5 or 41003-5A radiation shield.

<sup>f</sup> The 28415 adapter is required to install an EE181 in a 41003-5 or 41003-5A radiation shield.

<sup>g</sup> The 43502 requires 12 to 14 Vdc. Its blower uses 500 mA.

