

Solar Radiation Shields

For Temperature and Temperature/Relative Humidity Sensors



Rugged, Reliable, and Ready for any Application

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

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41303-5A 6-Plate Naturally Radiation Shield Shades and protects sensor	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	none
41303-5B 6-Plate Naturally Radiation Shield with Band Clamp Shades and protects sensor	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 5.1 cm (2.4 in.) OD	none
41003-5 10-Plate Naturally Radiation Shield Shades and protects sensor	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 , HC2S3 ^d	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in.) to 5.3 cm (2.1 in.) OD	none
41003-5A 10-Plate Naturally Radiation Shield with Band Clamp Shades and protects sensor	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 , HC2S3 ^d	CM500-series poles or user- supplied with a 5.1 cm (2.4 in.) OD	none

	Weight	Dimensions	Compatible Sensors ^a	Mounts to	Power Requirements
41005-5 14-Plate Naturally 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	none
43502-L Fan-Aspirated Radiation Shield Shades and draws ambient air past sensor for more accurate measurements	1.1 kg (2.5 lb)	length: 33 cm (13 in.) diameter: 20 cm (8 in.)	43347 RTD probe other sensors with up to 0.9 in. (2.5 cm) diameter	crossarm, mast, or user-supplied pipe with a 2.5 cm (1.0 in.) to 5.3 cm (2.1 in.) OD	12 to 14 Vdc @ 500 mA for blower

^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, 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 in a higher part of the shield; this configuration also requires the 18278 cable.

^d The 27731 hex plug is required to mount the HC2S3 in the 41003-5.