



Minimize Errors in Temperature Measurements

With a low-powered solution

Overview

The TS100SS, manufactured by Apogee Instruments, Inc., is a fan-aspirated radiation shield that minimizes temperature-measurement errors caused by incident solar radiation. The unique aerodynamic shape and rugged, low-power fan make it the first research-grade fan-aspirated shield that is practical for use on battery- or solar-powered stations. The shield provides excellent sensor protection and accommodates various

combinations of thermistors, PRTs, and humidity sensors using one of the sensor port adapter plugs.

Typical applications include air temperature and humidity measurements in weather networks, often for weather forecasting, and solar energy sites. Fan-aspirated shields are also important in the precise measurement of air temperature and humidity gradients above the land surface and in climate change monitoring.

Benefits and Features

- ▶ Low-powered fan suitable for solar-powered systems
- ▶ Aerodynamic design for continuous operation in high winds
- ▶ Logger-controlled fan speed for power reduction to < 25 mA

Specifications

Difference among Individual Replicate Shields	< 0.1°C	▶ 80 mA (at full speed)	
Aspiration Rate	▶ 6 m/s (at full speed) ▶ 3 m/s (at half speed)	IP Rating	IP55
Fan Input Voltage Requirement	10.8 to 13.2 Vdc	Warranty	4 years (against defects in materials and workmanship)
Fan Current Drain	▶ 25 mA (at half speed)	Diameter	27 cm (10.63 in.)
		Height	22 cm (8.66 in.)
		Weight	840 g (29.6 oz)

For comprehensive details, visit: www.campbellsci.com/ts100ss