



**SN500SS**  
Net Radiometer



# Digital, Low-cost Net Radiometer

## Overview

This four-component net radiometer, manufactured by Apogee Instruments, provides individual measurement of net radiation components. This sensor features an SDI-12 output, eliminating the need for multiple analog channels to measure

the individual components of net radiation. The SN500SS offers a complete package that includes a net radiometer, mounting rod, pigtail lead cable for data logger interface, and a carrying case.

## Specifications

Sensor	Two thermopile pyranometers, two pyrgeometers
Measurement Description	Measures incoming and outgoing short-wave and long-wave radiation
Heater	62 mA current drain and 740 mW power requirement at 12 Vdc
Operating Temperature Range	-50° to +80°C and 0 to 100% humidity
Response Time	1 s (SDI-12 data transfer rate; detector response times are 0.5 s)
Heater Current Drain	<ul style="list-style-type: none"> <li>› 0.6 mA (heaters off; communication disabled)</li> <li>› 63 mA (heaters on; communication enabled)</li> <li>› 1.5 mA (heaters off; communication enabled)</li> </ul>
Dimensions	11.6 x 4.5 x 6.6 cm (4.6 x 1.8 x 2.6 in.)

Weight	320 g (11.29 oz) with mounting rod and 5 m (16.4 ft) of lead wire
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Pyranometer	
Spectral Range	<ul style="list-style-type: none"> <li>› 295 to 2685 nm (downward-looking)</li> <li>› 385 to 2105 nm (upward-looking)</li> </ul>
Sensitivity	<ul style="list-style-type: none"> <li>› 0.057 mV per W/m<sup>2</sup> (upward-looking)</li> <li>› 0.15 mV per W/m<sup>2</sup> (downward-looking)</li> </ul>
Expected Output Range	<ul style="list-style-type: none"> <li>› 0 to 300 mV (downward-looking)</li> <li>› 0 to 114 mV (upward-looking)</li> </ul>

Pyrgeometer	
Spectral Range	5,000 to 30,000 nm
Sensitivity	0.12 mV per W/m <sup>2</sup>
Expected Output Range	-24 to +24 mV

For comprehensive details, visit: [www.campbellsci.com/sn500ss](http://www.campbellsci.com/sn500ss)

