CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

CS300-L
Pyranometer

Accurate and Dependable

Ideal for long-term deployment in harsh conditions

Overview

The CS300, manufactured by Apogee Instruments, measures total sun and sky solar radiation for solar, agricultural, meteorological, and hydrological applications. Its spectral range of 360 to 1120 nanometers encompasses most of the short-wave radiation that reaches the Earth's surface. This pyranometer connects directly to our dataloggers. Its output can be measured by our dataloggers.

Benefits and Features

- Compatible with most Campbell Scientific dataloggers
- Designed for continuous, long-term, unattended operation in adverse conditions
- Measurement waveband of 360 to 1120 nm
- Dome-shaped head prevents water from accumulating on the sensor head

Detailed Description

The CS300 uses a silicon photovoltaic detector mounted in a cosine-corrected head to provide solar radiation measurements. Its dome-shaped head prevents water from accumulating on the sensor head. To eliminate internal condensation, the sensor head is potted solid and the cable is shielded with a rugged Santoprene casing. The CS300 is calibrated against a Kipp & Zonen CM21 thermopile pyranometer to accurately measure sun plus sky radiation.

Specifications

Light Spectrum Waveband	360 to 1120 nm (wavelengths where response is 10% of maximum)
Measurement Range	0 to 2000 W m^{-2} (full sunlight ≈1000 W m^{-2})
Absolute Accuracy	±5% for daily total radiation
Sensitivity	5 W m^{-2} mV^{-1} (0.2 mV W^{-1} m^{-2})
Cosine Correction Error	±5% at 75° zenith angle; ±2% at 45° zenith angle
Temperature Response	0.04 ± 0.04% per °C
Response Time	< 1 ms

For comprehensive details, visit: **www.campbellsci.com.au/cs300-pyranometer**

Long-Term Stability	< 2% per year
Operating Temperature Range	-40° to +70°C
Relative Humidity Range	0 to 100%

Output	0.2 mV per W m^{-2}
Diameter	2.4 cm (0.9 in.)
Height	2.5 cm (1.0 in.)
Weight	65 g (2.3 oz) with 2-m (6.6-ft) lead wire

For comprehensive details, visit: **www.campbellsci.com.au/cs300-pyranometer**

Campbell Scientific Australia | 411 Bayswater Road | Garbutt, QLD 4814 | +61 (0)7 4401 7700 | www.campbellsci.com.au
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | THAILAND | SOUTH AFRICA | SPAIN | UK | USA