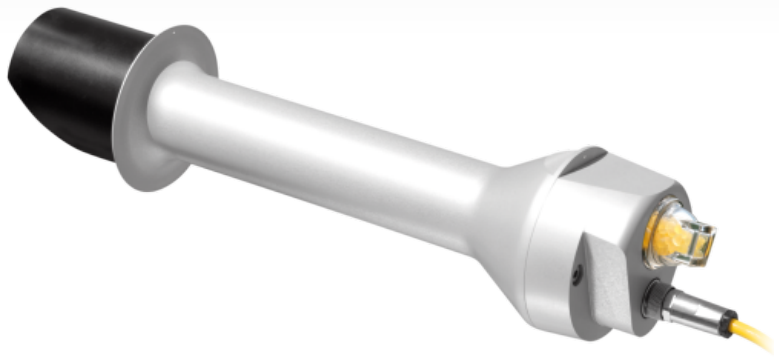
CAMPBELL SCIENTIFIC
WHEN MEASUREMENTS MATTER

CHP1-L
Pyrheliometer



For Unattended Direct Solar-Radiation Measurements

Overview

The CHP1-L, manufactured by Kipp & Zonen and cabled by Campbell Scientific, is a pyrheliometer used for unattended direct solar-radiation measurements. It is designed specifically to measure the direct beam solar irradiance with a field of view limited to 5 degrees. This is achieved by the shape of the collimation tube, precision apertures, and the detector design.

Benefits and Features

- ISO First Class
- Built-in temperature sensors

Detailed Description

To monitor direct normal irradiance, a CHP1 Pyrheliometer is mounted to a user-supplied sun tracker such as Kipp & Zonen's Solys2. The CHP1 pyrheliometer measures the direct-beam solar irradiance with a field of view limited to 5 degrees. The limited field of view requires the CHP1 to be continuously pointed toward the sun. The Solys2 Sun Tracker rotates on two axes and uses a GPS receiver to keep the CHP1 aimed at the sun throughout the day.

Specifications

Sensor	Pyrheliometer
Measurement Description	Measures the direct beam solar irradiance with a field of view limited to 5 degrees
Spectral Range	200 to 4000 nm
Sensitivity	7 to 14 µV/W/m^2
Response Time	< 5 s
Zero Offset B	< 1 W/m^2
Temperature Dependence of Sensitivity	< 0.5% (-20° to +50°C)
Field of View (FOV)	5° ±0.2°

Operating Temperature Range	-40° to +80°C
Non-Linearity	< 0.2%
Maximum Irradiance	4000 W/m^2
International Standards	First Class ISO

Body Diameter	3.8 cm (1.5 in.)
Base Diameter	7.6 cm (3.0 in.)
Length	31.6 cm (12.4 in.)
Weight	0.9 kg (1.98 lb) excluding cable

For comprehensive details, visit: www.campbellsci.com/chp1-l

CAMPBELL SCIENTIFIC®
Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | www.campbellsci.com
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | INDIA | SOUTH AFRICA | SPAIN | THAILAND | UK | USA