



Weather Resistant

PTFE-coated absorbers instead of fragile dome

Overview

The NR-LITE2, manufactured by Kipp & Zonen and cabled for use with Campbell Scientific data loggers, is a rugged net radiometer that measures the energy balance between incoming short-wave and long-wave infrared radiation relative

to surface-reflected short-wave and outgoing long-wave infrared radiation. It is directly connected to a Campbell Scientific data logger and is widely used in agriculture and hydrology applications.

Benefits and Features

- Compatible with most Campbell Scientific data loggers
- Integrated bubble level ensures proper installation
- Includes rod that deters birds from roosting on the radiometer
- PTFE-coated absorbers are weather resistant without using a fragile plastic dome

Detailed Description

The NR-LITE2 includes two black conical absorbers—one facing upward and the other facing downward. The absorbers are coated in PTFE, making them resistant to weather without using a fragile plastic dome. Both absorbers are calibrated to an identical sensitivity coefficient.

The NR-LITE2 has a bubble level to ensure proper installation and a rod that deters birds from roosting on the sensor. It produces a millivolt signal that is measured directly by a Campbell Scientific data logger.

Specifications

Sensor Two black conical absorbers—one facing upward and the other

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facing downward

Measurement Description Measures incoming and outgoing

short-wave and long-wave

radiation

Spectral Range 0.2 to 100 µm



Response Time	< 20 s (nominal)
Sensitivity	$10 \mu V W^{-1} m^2$ (nominal)
Output Range	±25 mV
Measurement Range	±2000 W m ⁻²
Operating Temperature Range	-40° to +80°C

Sensor Diameter	8.0 cm (3.1 in.)
Support Arm Diameter	1.6 cm (0.6 in.)
Support Arm Length	80 cm (31.5 in.)
Sensor Weight	200 g (7.0 oz)
Support Arm Weight	635 g (23 oz)

