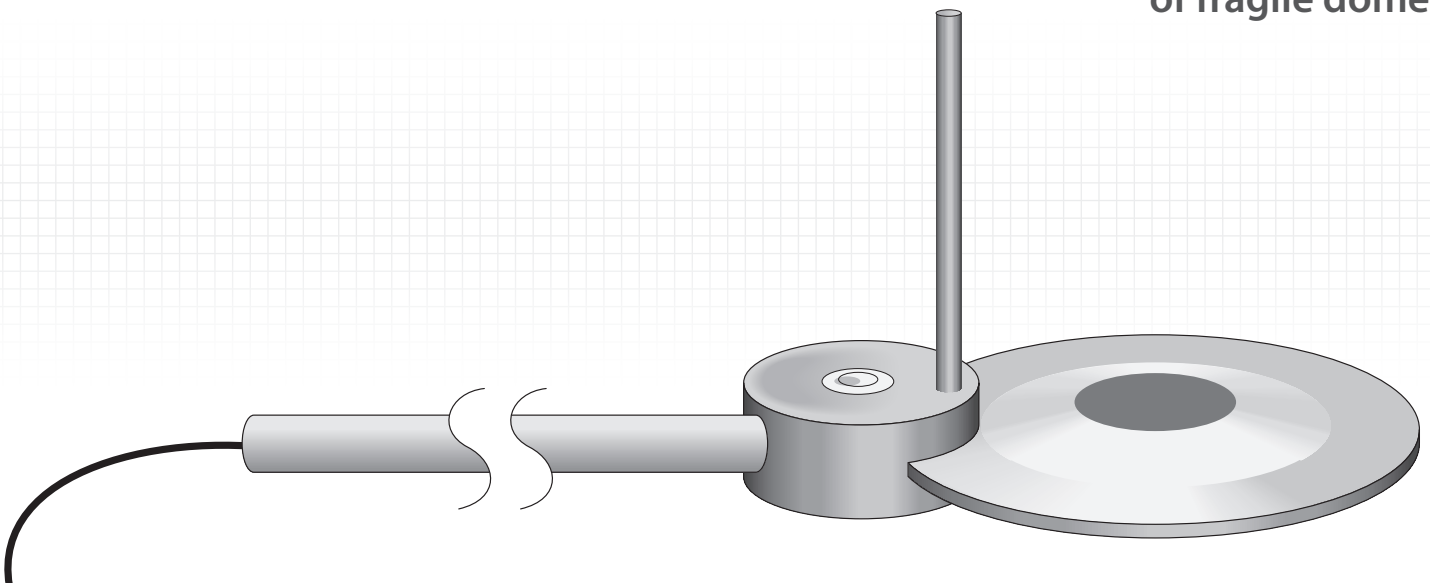
CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

NR-LITE2

Net Radiometer

Weather Resistant

PTFE-coated absorbers instead of fragile dome



Overview

The NR-LITE2* 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 datalogger and is widely used in agriculture and hydrology applications.

Benefits and Features

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

Technical Description

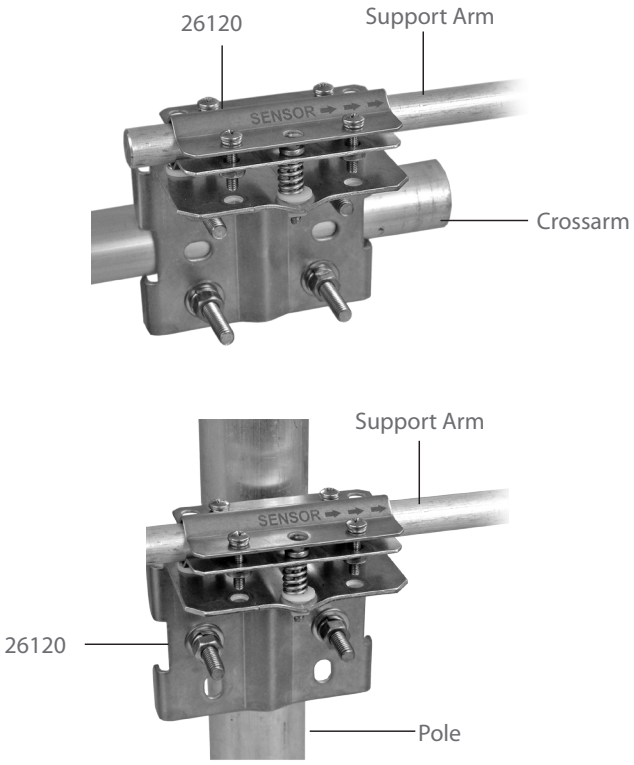
The NR-LITE2 includes two black conical absorbers—one facing upward and the other facing downward. The absorbers are coated in PTFE, making them resistant to weather without using a fragile plastic dome. Both absorbers are calibrated to an identical sensitivity coefficient.

The net radiometer outputs a millivolt signal that is measured directly by a Campbell Scientific datalogger. Please note that the NR-LITE2 is not compatible with our CR200(X)-series dataloggers.

**The NR-LITE2 is manufactured by Kipp and Zonen but cabled for use with Campbell Scientific dataloggers.*

Mounting

To avoid shading/reflections and to promote spatial averaging, the NR-LITE2 should be mounted at least 1.5 m above the ground or crop canopy and away from all obstructions or reflective surfaces that might adversely effect the measurement. Campbell Scientific recommends mounting the NR-LITE2 to a separate vertical pipe at least 25 feet away from other mounting structures. The 26120 Net Radiation Sensor Mounting Kit is used to mount the NR-LITE2 to a vertical pole or a horizontal crossarm such as the CM202, CM203, CM204, or CM206.



The 26120 Net Radiation Sensor Mounting Kit allows the radiometer to be mounted to a vertical pole or horizontal crossarm.

Ordering Information

Net Radiometer	
NR-LITE2-L	Kipp & Zonen Net Radiometer with user-specified cable length. Enter the cable length in feet after the -L. A 48-ft cable length is recommended. Must choose a cable termination option (see below).

Cable Termination Options (choose one)	
-PT	Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
-PW	Cable terminates in connector for attachment to a prewired enclosure.

Mount	
26120	Net Radiation Sensor Mounting Kit for mounting the radiometer to a vertical pole or horizontal crossarm.

Specifications

- Sensor: Blackened thermopile
- Spectral Response: 0 to 100 µm
- Response Time (e^{-1}): 20 s (nominal)
- Sensitivity: 10 µV W^{-1} m^2 (nominal)
- Output Range: ±25 mV
- Measurement Range: ±2000 W m^{-2}
- 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)
- Operating Temperature Range: -30° to 70°C