

NR-LITE

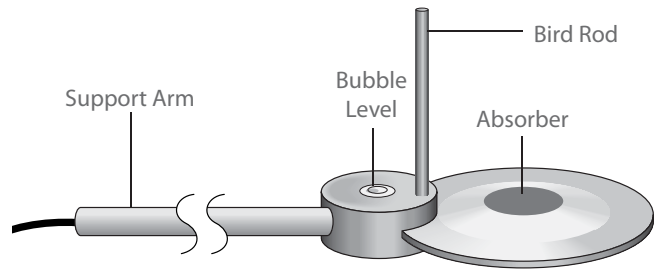
Net Radiometer

The NR-LITE is a rugged net radiometer manufactured by Kipp & Zonen. Net radiometers measure the energy balance between incoming short-wave and long-wave IR radiation relative to surface reflected short-wave and outgoing long-wave IR radiation. This net radiometer includes two black conical absorbers; one facing upward, the other facing downward. They are coated in Teflon® making them resistant to weather without requiring a fragile plastic dome. Both absorbers are calibrated to an identical sensitivity coefficient.

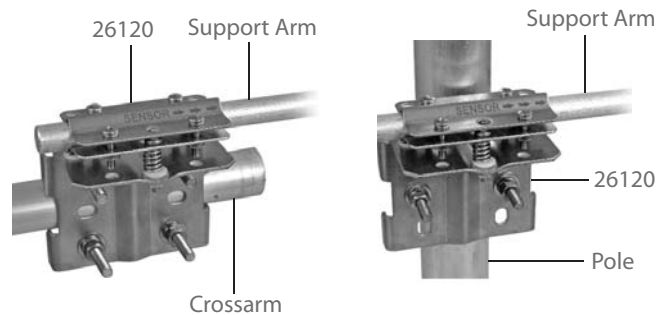
The net radiometer outputs a millivolt signal that is measured directly by a Campbell Scientific datalogger. Please note that the NR-LITE is not compatible with our CR200(X)-series dataloggers.

Mounting

To avoid shading effects and to promote spatial averaging, the NR-LITE should be mounted at least 5 ft (1.5 m) above the ground. Campbell Scientific recommends mounting the NR-LITE 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-LITE to a vertical pole or a horizontal crossarm (CM202, CM204, or CM206).



The NR-LITE includes a bubble level to aid in correct installation and a rod that deters birds from roosting on the sensor.



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-LITE-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 seconds (nominal)
Sensitivity:	10 $\mu\text{V W}^{-1} \text{m}^2$ (nominal)
Output Range:	$\pm 25 \text{ mV}$
Range:	$\pm 2000 \text{ W m}^{-2}$
Temperature Range:	-30° to 70°C
Dimensions	
Sensor:	3.1 inch (8.0 cm) diameter
Support Arm:	0.6 inch (1.6 cm) diameter; 31.5 inch (80 cm) length
Weight:	23 oz. (635 g)
Datalogger Requirements:	One differential or single-ended analog channel
CE Compliance:	CE compliant under the European Union's EMC directive

