

NR Lite2



NR Lite2 is a single-component net radiometer widely used in agriculture and hydrology. The thermopile detector is fitted with a black conical absorber on each side that has a very wide spectral response from the Ultraviolet (UV) to the far infrared (FIR). The black surface is protected by an environmentally resistant anti-stick coating.

The signal output is the difference between the sun / sky radiation and the ground radiation and can be positive (day time) or negative (night time) depending upon the conditions. This single output provides a direct measurement of the total net radiation balance.

There is an integral mounting rod for fitting to masts and poles, a bubble level, 15 m long signal cable, and a stick to prevent birds settling on the instrument.

For the measurement of all four radiation components separately; upwards and downwards, short-wave and long-wave radiation, please use the CNR4 net radiometer.

Specifications	
Spectral range (50% points)	0.2 to 100 μm
Sensitivity	10 $\mu\text{V}/\text{W}/\text{m}^2$ (nominal)
Operational irradiance (net)	-2000 to 2000 W/m^2
Response time (63%) (95%)	< 20 s < 60 s
Non-linearity (-1000 to 1000 W/m^2)	< 1%
Directional response (up to 60° solar zenith angle)	< 3%
Temperature response (-10 °C to +40 °C)	< 6%
Field of view (upper / lower)	180°
Accuracy of bubble level	< 0.2°
Sensitivity asymmetry (upper / lower)	< 15%
Mounting rod (fixed)	800 mm long x 20 mm \varnothing
Detector type	Thermopile
Operational temperature range	-30 °C to +70 °C
Storage temperature range	-30 °C to +70 °C
Humidity range	0 to 100% non-condensing
Ingress Protection (IP) rating	67

Part number	Instrument
0344920-003	NR Lite2 Net Radiometer • single-component • 15 m cable
0344920-703	NR Lite2 Net Radiometer • METEON • 15 m cable
0344920-803	NR Lite2 Net Radiometer • AMPBOX • 15 m cable
Note: AMPBOX is adjusted so that 4 mA output = -400 W/m^2 , 8 mA = 0 W/m^2 and 20 mA = 1200 W/m^2	
Note: NR Lite2 will not fit in the METEON carrying case	

Part number	Accessory
0369701	CMB1 Mounting Bracket To enable easy attachment of the mounting rod to a pole or a wall