

RADIATION MEASURING TECHNOLOGY

Net Radiometer NR Lite

Part number: 7.1415.40.000

Instrument for the measurement of the net radiation, that means the instrument forms the difference between the global radiation from above (solar radiation and long-wave atmospheric counter radiation) and the global radiation from below (short-wave and long-wave reflection radiation of the earth)

The output signal is in proportion to the net radiation, and can be interpreted as radiation

energy which is absorbed from the earth's surface.



Specification

Part number: 7.1415.40.000

Radiation	
Measuring range	-2000 ... 2000 W/m ²
Sensitivity	10 μV/W/m ²
Typ. Signal output	-25 ... 24 mV
Spectral range	200 ... 100 000 nm
Response time	20 sec
Sensor type	thermo-element

General

Ambient temp.	-30 ... +70 °C
Electr. connection	cable, 15 m long
Dimension	Ø 80
Weight	0.26 kg

Versions

No other versions of this product are available.

Accessories

Product	Product name	Brief description
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Universal Amplifier
7.1415.00.200

The Universal Amplifier serves for the connection of various sensors with voltage-, or PT100 output.

Data output digital

Interface	RS485 / RS422
Baudrate	1200 ... 115200 Baud

Data output analog

Chanel	3
Output parameters	0 ... 1 V, 0 ... 5 V, 0 ... 10 V, 4 ... 20 mA, 0 ... 20 mA Resolution 1/10000 FS

Data input analog

Meas. range	0.1 ... 1V resolution 1 μ V switchable to -1 ... +10 V Alternatively, each channel is switchable to PT 100: max. -99.0 ... +99.0 $^{\circ}$ C PT100 resolution: 1/10, 1/100, 1/1000 $^{\circ}$ C, settable
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General

Power supply	7 ... 24 V DC
Ambient temp.	-40 ... +60 $^{\circ}$ C
Electr. connection	Cable gland and terminal strip
Protection	IP 65
Dimension	120 x 80 x 55 mm
Weight	0.25 kg
Material housing	Polycarbonate



Preamplifier
7.1415.01.841

Instrument for transforming small mV-signals from the radiation sensor into a standardized voltage signal.

Data output analog

Channels	1
Output type	4 ... 20 mA
Output range	0 ... 1600 W/m ²

Data input analog

Channels	1
Input type	-10 ... 75 mV

General

Power supply	7.5 ... 45 V DC (via 4 ... 20 mA lines)
Ambient temp.	-40 ... +85 °C
Electr. connection	2 x cable gland
Protection	IP 66
Dimension	64 x 98 x 34 mm
Weight	0.3 kg
Material housing	aluminium, powder coated

