

## RADIATION

### Pyranometer CMP 10

**Part number: 7.1415.01.010**

The global radiation results from the sum of direct radiation and diffuse radiation. The WMO-recommended measuring value transmitter meets the ISO 9060 -classification "Secondary Standard" Adjustable feet and a level allow an easy horizon-adjustment. Delivery includes calibration certificate.



### Specification

**Part number: 7.1415.01.010**

Radiation	
Measuring range	0 ... 4000 W/m <sup>2</sup>
Sensitivity	7 ... 14 µV/W/m <sup>2</sup>
Typ. Signal output	0 ... 15 mV
Spectral range	285 ... 2800 nm
Non-linearity	<0.2 % @ <1000 W/m <sup>2</sup>
Internal resistance	10 ... 100
Response time	<1.7 sec @ 63 % vom Endwert <5 sec @ 95 % vom Endwert
Sensor type	Thermo-element mit 32 Einzelelementen
General	
Ambient temp.	-40 ... +80 °C
Electr. connection	plug with 10 m cable
Dimension	Ø 150 x 92 mm
Weight	0.9 kg





### Versions

No other versions of this product are available.

### Accessories

Product	Product name	Brief description
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	<b>Traverse 0,8 m</b> 4.3171.40.002	<p>For mounting of a Pyranometer CMP11 / 6 / 3 And a sunshine duration sensor-CSD3 onto a mast.</p> <table border="1"> <tr> <td colspan="2"><b>General</b></td> </tr> <tr> <td>Clamping range</td> <td>Ø 48 ... 102 mm</td> </tr> <tr> <td>Sensor distance</td> <td>0.4 / 0.8 m from mast</td> </tr> <tr> <td>Material</td> <td>Aluminium / Stainless steel</td> </tr> <tr> <td>Weight</td> <td>1 kg</td> </tr> </table>	<b>General</b>		Clamping range	Ø 48 ... 102 mm	Sensor distance	0.4 / 0.8 m from mast	Material	Aluminium / Stainless steel	Weight	1 kg
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	<b>Hanger 1 m ( for radiation sensors )</b> 4.3185.xx.009	<p>The hanger is used for laterally mounting of a radiation- or brightness transmitter onto a mast.</p> <table border="1"> <tr> <td colspan="2"><b>General</b></td> </tr> <tr> <td>Length</td> <td>1 m</td> </tr> <tr> <td>Material</td> <td>Aluminium</td> </tr> <tr> <td>Tube diameter</td> <td>Ø 50 mm</td> </tr> <tr> <td>Weight</td> <td>1.8 kg</td> </tr> </table>	<b>General</b>		Length	1 m	Material	Aluminium	Tube diameter	Ø 50 mm	Weight	1.8 kg
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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.

<b>Data output digital</b>	
Interface	RS485 / RS422
Baudrate	1200 ... 115200 Baud
<b>Data output analog</b>	
Chanel	3
Output parameters	0 ... 1 V, 0 ... 5 V, 0 ... 10 V, 4 ... 20 mA, 0 ... 20 mA Resolution 1/10000 FS
<b>Data input analog</b>	
Chanel	4
Meas. range	0.1 ... 1V resolution 1 $\mu$ 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
<b>General</b>	
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
Matirial 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 <sup>2</sup>

**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
Matirial housing	aluminium, powder coated

