

## PYRANOMETER



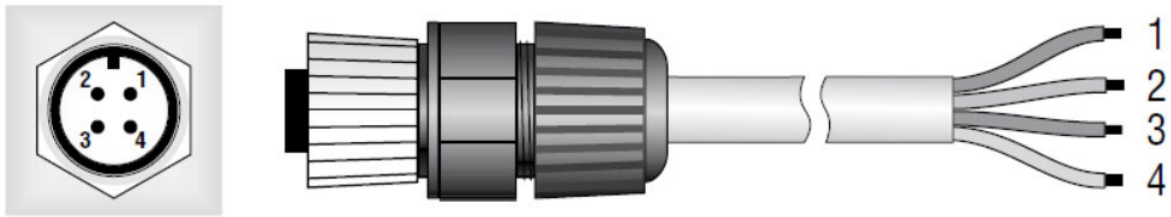
B (First) Class LPY-CB and C (Second) Class LPY-CC pyranometers which fully comply with ISO 9060 standards, and meet the requirements defined by the World Meteorological Organization (WMO). These are strong and reliable ground-based instruments, especially designed to be used under all weather conditions. They are suitable for installation on the field.

Recommended use: atmospheric research, weather stations, climatology, energy saving research, productive efficiency test of photovoltaic plants, etc...

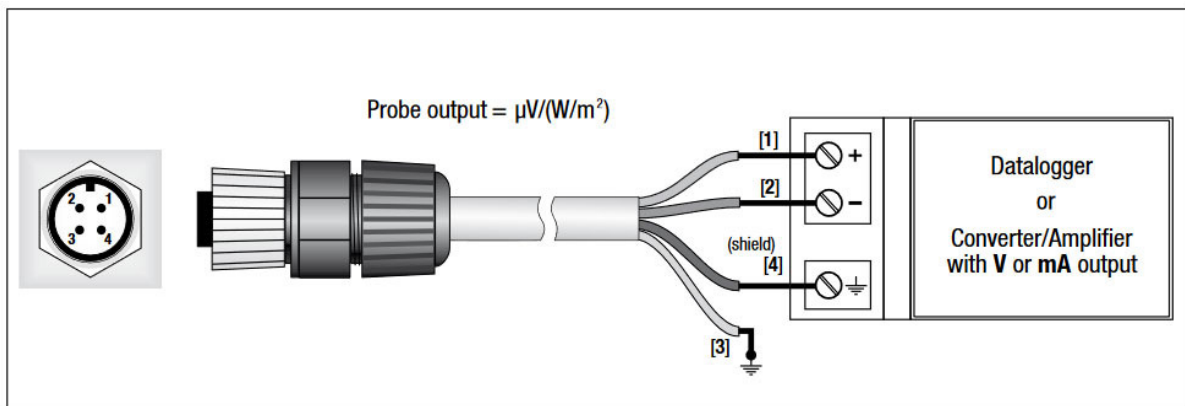
Pyranometers LPY-CB and LPY-CC are well suited for the measurement of incoming global solar radiation (0.3 $\mu$ m ÷ 3 $\mu$ m spectral range)

Technical Specification	LPY-CB	LPY-CC
Typical sensitivity	6 ÷ 12 $\mu$ V/Wm <sup>-2</sup>	5 ÷ 15 $\mu$ V/Wm <sup>-2</sup>
Measuring range	0 ÷ 2000 W/m <sup>2</sup>	
Viewing field	2 $\pi$ sr	
Spectral range (50%)	283 ÷ 2800 nm	300 ÷ 2800 nm
Operating temperature	-40 °C ÷ 80 °C	
Weight	0.90 Kg	0.45 Kg
ISO 9060 Specifications		
Response time 95%	< 10 s	< 20 s
Response to thermal radiation (200Wm <sup>-2</sup> )	<10 W/m <sup>2</sup>	<15 W/m <sup>2</sup>
Response to temperature change 5K/h	<  $\pm$ 4 W/m <sup>2</sup>	<  $\pm$ 4 W/m <sup>2</sup>
total zero off-set including the effects a), b) and other sources	<   $\pm$ 15  W/m <sup>2</sup>	<   $\pm$ 20  W/m <sup>2</sup>
Long-term instability (1 year)	<   $\pm$ 1  %	<   $\pm$ 1  %
Non-linearity	<   $\pm$ 1  %	<   $\pm$ 1.5  %
Response according to the cosine law	<   $\pm$ 18  W/m <sup>2</sup>	<   $\pm$ 20  W/m <sup>2</sup>
Spectral error	<   $\pm$ 0.5  %	<   $\pm$ 2  %
Temperature response (-10...+40°C)	< 1.5 %	< 3 %
Tilt response	<   $\pm$ 2  %	<   $\pm$ 2  %

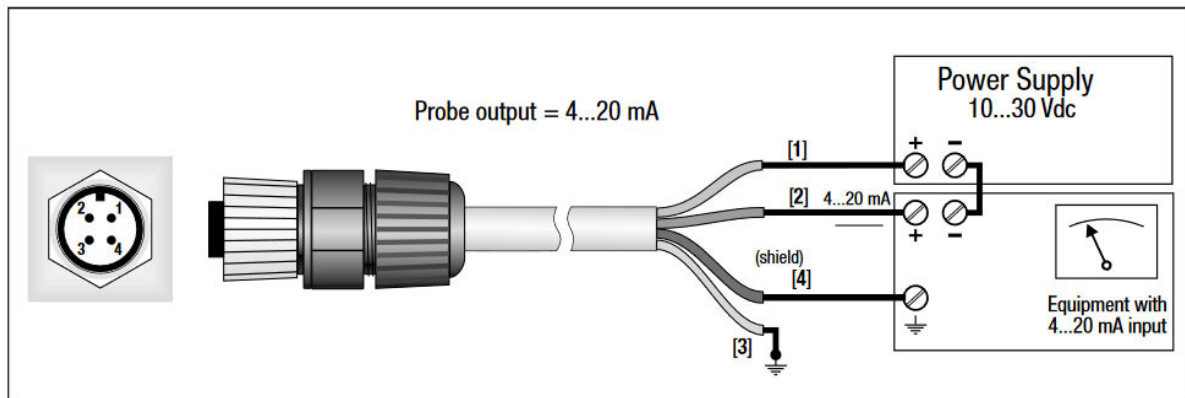
## WIRING DIAGRAM



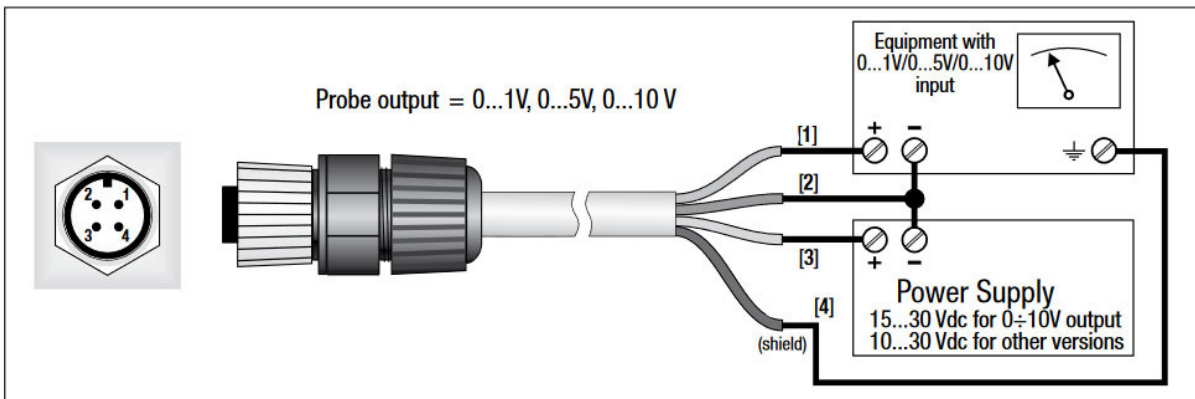
### LPY-CB-MV / LPY-CC-MV



### LPY-CB-A / LPY-CC-A (4...20 mA)



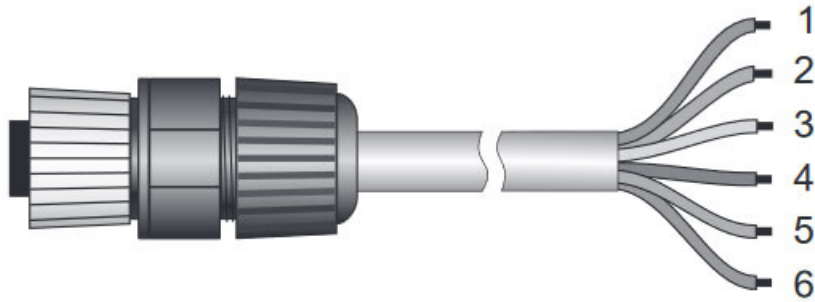
### LPY-CB-V / LPY-CC-V (0-10 V)



## LPY-CB-RS485 / LPY-CC- RS485 (RS485 MODBUS RTU)



Fixed 8-pole M12 plug



Female 8-pole M12 connector

Connector	Function
1	Power supply negative (GND)
2	Power supply positive (+Vdc)
3	Not connected
4	RS485 A/-
5	RS485 B/+
6	Housing
7	Not connected
8	Not connected