

PYRANOMETER



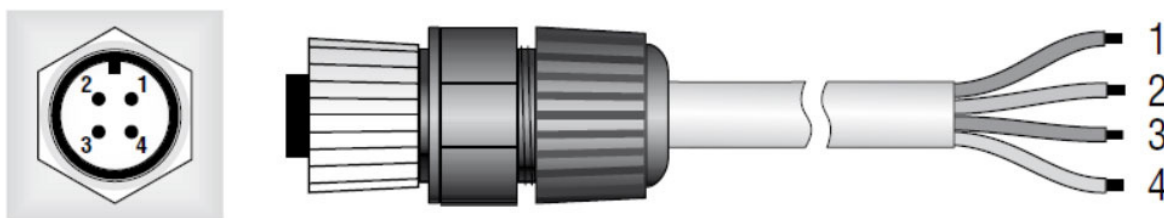
B (First) Class LPY-CB and C (Second) Class LPY-CC pyranometers which fully comply with ISO 9060 standards, and meet the requirements defined by the World Meteorological Organization (WMO). These are strong and reliable ground-based instruments, especially designed to be used under all weather conditions.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

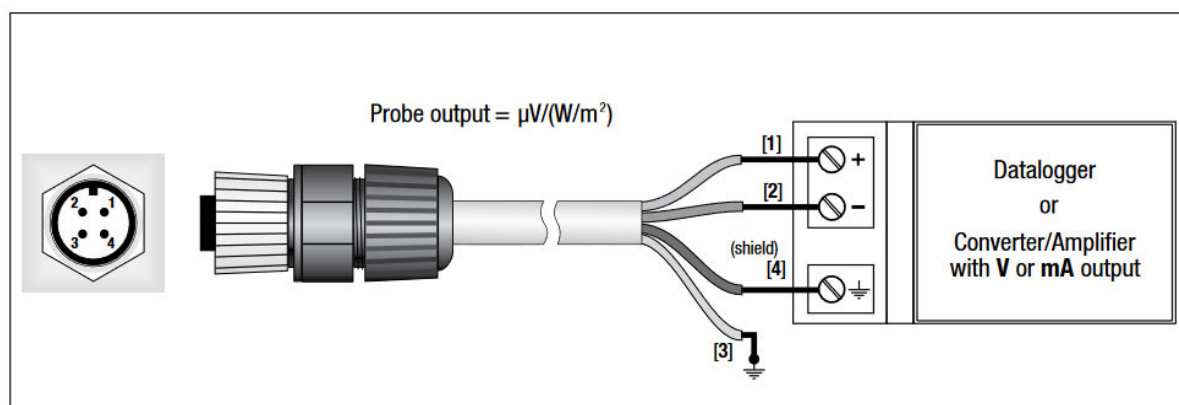
Pyranometers LPY-CB and LPY-CC are well suited for the measurement of incoming global solar radiation ($0.3\mu\text{m} \div 3\mu\text{m}$ spectral range)

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

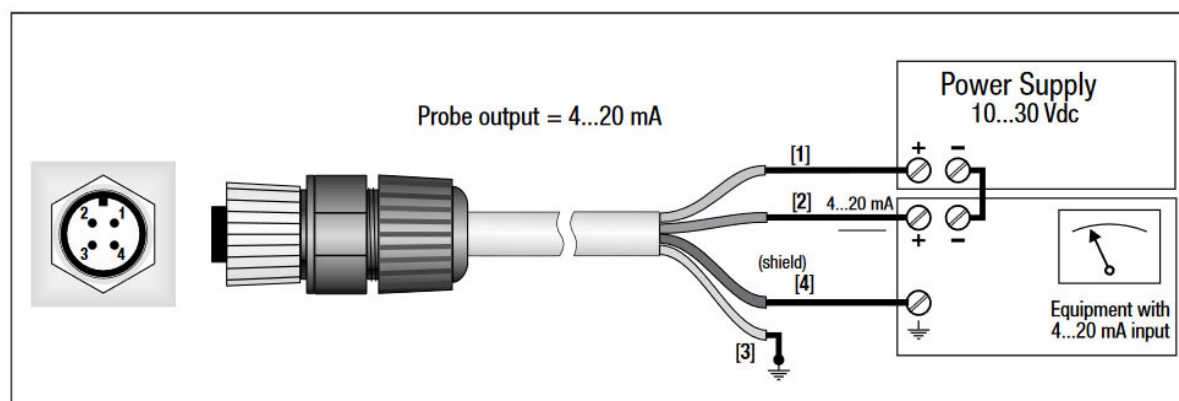
WIRING DIAGRAM



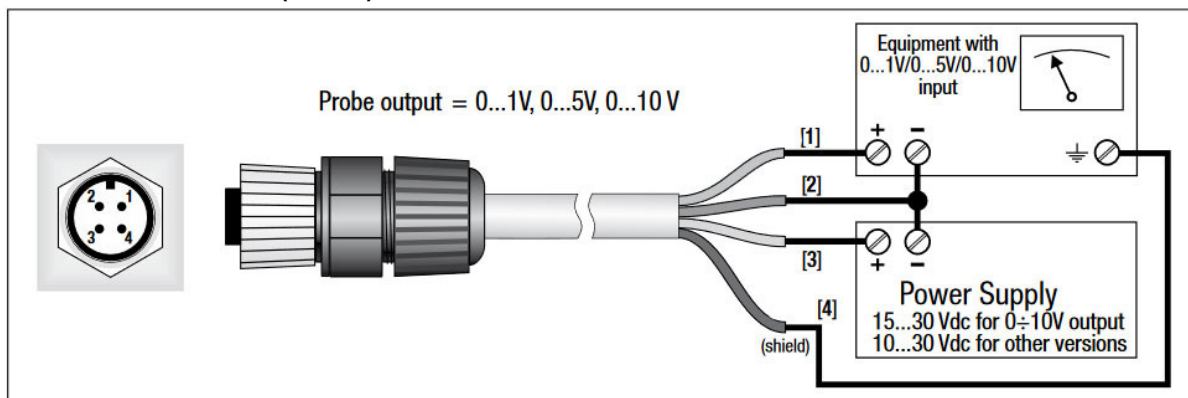
LPY-CB-MV / LPY-CC-MV



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



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



LPY-CB-SB / LPY-CC-SB (4...20 mA and RS485 MODBUS RTU)

Analog 4...20 mA and RS485 MODBUS RTU using SignalBox Pyranometer



This Pyranometer Transmitter features 4-20mA current loop and Modbus RTU protocol outputs, providing a wide range of applications and ensuring high accuracy and precision in solar radiation measurements.

- 4-20mA Current Loop: A reliable communication protocol used in standard industrial signaling.
- Modbus RTU Output: An ideal communication protocol for remote access and data collection.
- Precision Measurement: Ensures high accuracy in solar radiation measurements.

