



## LP PYRA 08 - LP PYRA 08AC - LP PYRA 08AV PIRANOMETERS

Delta Ohm manufactures, according to ISO 9060 and the recommendations of the WMO, the range of 2<sup>nd</sup> class pyranometers **LP PYRA 08**. These instruments are robust and reliable, provided to withstand adverse climatic conditions and suitable for installation in the field.

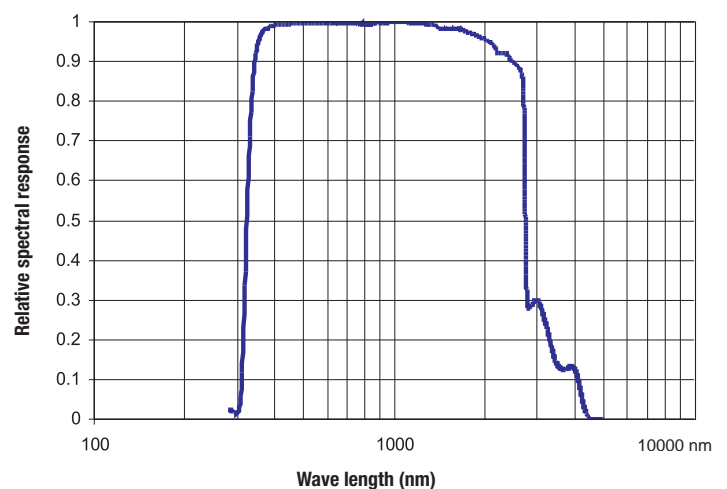
The pyranometer **LP PYRA 08** measures the radiation on a flat surface (Watt/m<sup>2</sup>). The radiation measured is the sum of direct solar irradiance and diffuse irradiance (global radiation).

The sensors have mV output and do not need to be powered, their typical sensitivity is 10 mV/(kW/m<sup>2</sup>). The pyranometers are also available with an amplified and converted 4...20mA current or 0...10Vdc voltage signal.

Each pyranometer is calibrated individually with reference to the WWR (World Radiometric Reference in Davos CH) and accompanied by calibration report.

Thanks to a new sensor **LP PYRA 08** has a response time of less than 8 seconds and is used when it is necessary to record changes in short and very short-term irradiation.

Technical specifications	LP PYRA 08
Typical sensitivity	10 mV (kW/m <sup>2</sup> )
Impedance	5Ω-50Ω
Measuring range	2000 W/m <sup>2</sup>
Viewing field	2πsr
Spectral field	305 nm– 2800 nm (50%) (Figure 1)
Working temperature	-40 °C – 80 °C
<b>Specifications according to ISO 9060</b>	
Response time (95%)	<b>&lt;8 sec</b>
Zero Off-set	25 W/m <sup>2</sup>
a) Response to thermal radiation (200W/m <sup>2</sup> )	<25W/m <sup>2</sup>
b) Response to a change of temperature 5K/h	< ±6  W/m <sup>2</sup>
Long-term instability (1 year)	< ±2  %
Non linearity	< ±22  W/m <sup>2</sup>
Response according to cosine	< ±7  W/m <sup>2</sup>
Spectral selectivity	<8%
Tilt response	< ±4  %



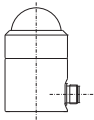
**Figure 1.** Typical spectral response of the pyranometers.

PURCHASING CODES

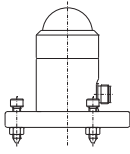
**LP PYRA 08:** Second Class pyranometer according to ISO 9060, fast response sensor, complete with calibration report. Different configurations available.  
**M12** male connector. **The cable with the female connector has to be ordered separately.** Uses **CPM12 AA4** cables... , 2, 5 or 10 meter length.

LP PYRA	<div>08 = output in mV/(kW/m²) 08BL = output mV/(kW/m²), complete with base and level 08BLAC = output 4÷20 mA, complete with base and level 08BLAV = 0÷10 V, complete with base and level</div>
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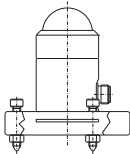
CABLES:	
CPM12 AA4	<div>2 = 2m long 5 = 5m long 10 = 10m long</div>



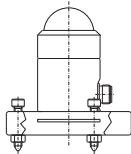
LP PYRA 08



LP PYRA 08BL

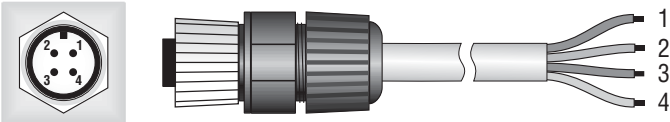


LP PYRA 08BLAC



LP PYRA 08BLAV

WIRING DIAGRAMS:  
**4-poles cable CPM12 AA4...**



Fixed 4-pole plug M12      Flying 4-pole M12 connector

**LP PYRA 08, LP PYRA 08BL**

Connector	Function	Color
1	Positive (+)	Red
2	Negative (-)	Blue
3	Not connected	White
4	Screen (±)	Black

**LP PYRA 08BLAC**

Connector	Function	Color
1	Positive (+)	Red
2	Negative (-)	Blue
3	Not connected	White
4	Screen (±)	Black

**LP PYRA 08BLAV**

Connector	Function	Color
1	(+) Vout	Red
2	(-) Vout and (-) Vcc	Blue
3	(+) Vcc	White
4	Screen (±)	Black



LP PYRA 08BLAC  
LP PYRA 08BLAV



LP PYRA 08 BL



LP PYRA 08