

Litemeter LM1-420

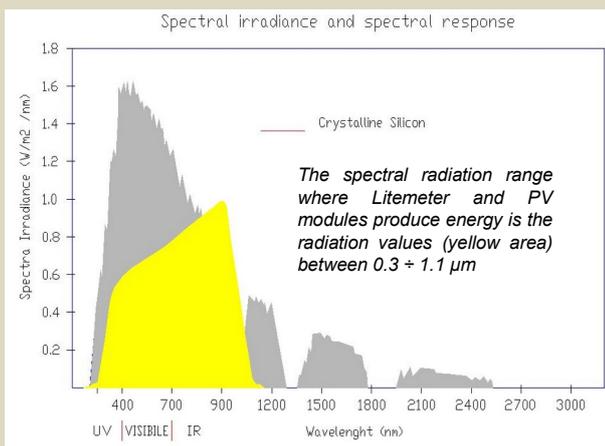
Litemeter LM1-420 is an analog photovoltaic pyranometer (or solar irradiance sensor) equipped with a monocrystalline silicon cell and its output is temperature compensated. Manufacturing and Calibrations are done following the **IEC 61215, IEC 60904-2; 60904-4; 60904-10 regulations.**

Measurement features

Litemeter LM1-420 is the smallest one of our range. It is suitable for little and medium size PV systems. It needs an external power supply.

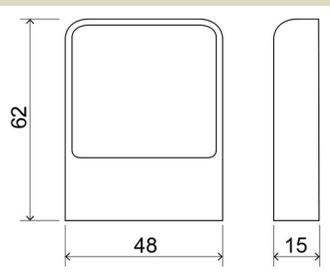
The **4-20mA current loop output** allows to obtain reliability and a high immunity to signal noise. This guarantees quality signal even at long distances (30m and more) also in areas with many electromagnetic disturbances like industrial areas and photovoltaic systems greater than 100 Kw.

Spectrum of interest



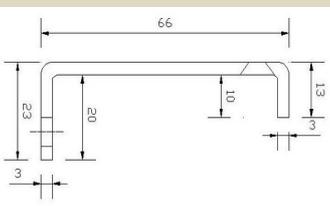
Calibration

Each Litemeter LM1-420 is calibrated for comparison with our Silicon Reference Cell calibrated periodically by ISFH Institute (DAKKS) and a HP34410A Multimeter.



Physical features

Transparent resin, UV-resistant, anodized aluminum housing, high durability, practical mounting bracket with screw clamp, UV-resistant cable.



Most common uses

Litemeter LM1-420 is used in small-medium PV systems, but for its high EMC immunity can be used in large PV systems

LITEMETER SENSOR		
Product	Litemeter LM1-420	
Standard Reference	IEC 60904-2 IEC 60904-4 IEC 60904-10	
Output	Analog	
Input Range	irradiance	0 ÷ 1250 W / m ²
Output	Current	4 ÷ 20 mA (max output: 25mA)
Output precision	irradiance	±3.5% Temperature compensated
Working temperature	-25 ÷ +80 °C	
Response Time	< 100ms	
Sensor Type	Solarimeter with temperature compensation	
Supply	Ext. Current loop	9 ÷ 30 Vdc
Electronics non-linearity	< ± 0,2 %	
Temperature drift, -30 + 90°C	≤ ± 0,4 % at 1000 W/m ²	
Overall measurement uncertainty	± 2,5 % @ 1000 W/m ²	
Uncertainty reference cell	± 1,2 % (ISFH , accredited by Dakks)	
PV cell	monocrystalline silicon	
Encapsulant	Transparent resin, UV-resistant (IEC 60904-2)	
Cable	50cm cable, UV and high temperature resistant	
Connector	Female 3 pin (IP67 code)	
Dimensions	48x62x15 mm without fixing bracket	
Weight	100 g	
IP code	IP 65	

