Litemeter LM1-420

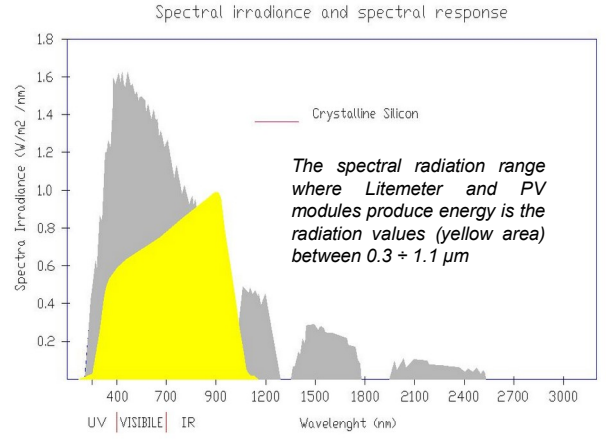
Litemeter LM1-420 is an analog photovoltaic pyranometer (or solar irradiance sensor) equipped with a monocrystalline silicon cell and its output is temperature compensated. Manufacturing and Calibrations are done following the **IEC 61215, IEC 60904-2; 60904-4; 60904-10 regulations.**

Measurement features

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

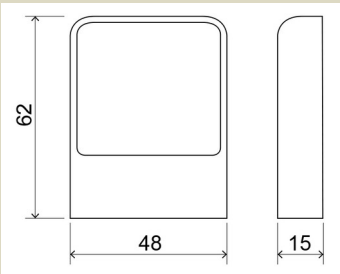
The 4-20mA current loop output allows to obtain reliability and a high immunity to signal noise. This guarantees quality signal even at long distances (30m and more) also in areas with many electromagnetic disturbances like industrial areas and photovoltaic systems greater than 100 Kw.

Spectrum of interest

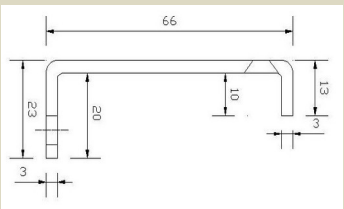


Calibration

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 / m2*
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/m2	
Overall measurement uncertainty	± 2,5 % @ 1000 W/m2	
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*	

Company with ISO 9001 quality management system certification