

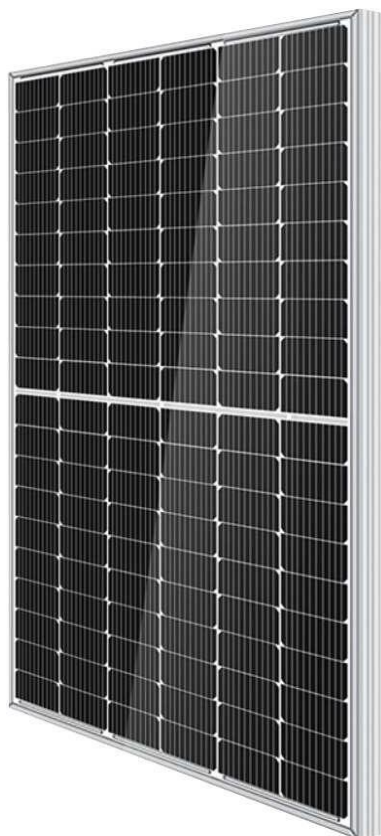


JUST photovoltaic panels

Monocrystalline photovoltaic panel

JST182*182-M-60-MH-450W

index: PF-J452X6-91



maximum output power

**450
W**

maximum module performance

**20,79
%**

Power Guarantee

0/+5W

FEATURES



High conversion efficiency.
High module efficiency guarantees the output power.



Positive tolerance from 0 to + 5W.
Details in the specifications



Self-cleaning glass.
Coating glass for self-cleaning, reduces surface dusting.



Excellent performance with low irradiation.
Excellent module performance even in poor conditions such as morning or overcast.



Excellent mechanical load resistance.
2400 Pa wind load, 5400 Pa snow load.

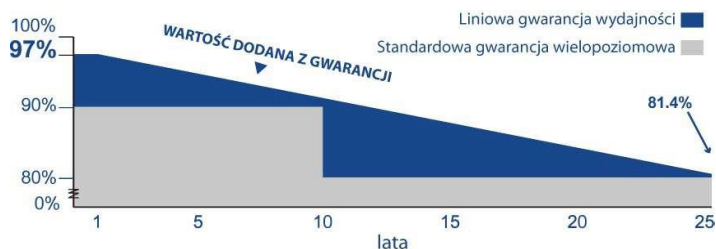
WARRANTIES

25

25-year performance guarantee

10

10-year guarantee on materials and workmanship



IEC 61215 Ed.2
IEC 61730
UL 1703



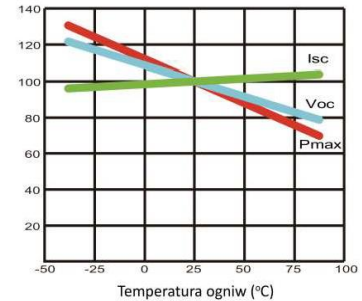
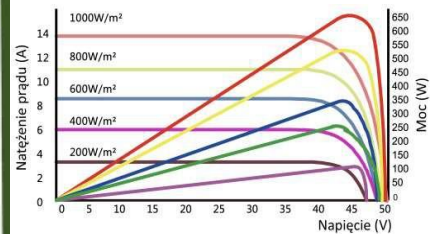
Electrical parameters

| Model/Typ (JST450M/120H) | 440 | 445 | 450 | 455 | 460 |
|------------------------------------|------------|--------|--------|--------|--------|
| Peak power [W]. | 440 | 445 | 450 | 455 | 760 |
| Module capacity | 20,33% | 20,56% | 20,79% | 21,02% | 21,25% |
| Maximum output voltage [V] | 34,20 | 34,50 | 34,70 | 34,90 | 35,20 |
| Maximum output current [A] | 12,84 | 12,90 | 12,96 | 13,02 | 13,08 |
| Open circuit voltage [V] | 41,00 | 41,20 | 41,40 | 41,60 | 41,80 |
| Short-circuit current [A]. | 13,58 | 13,63 | 13,68 | 13,73 | 13,78 |
| Power tolerance | 0 do + 5 W | | | | |
| Maximum rated system voltage [V]. | 1500 V | | | | |
| Module cell operating temperature | 41 ± 3 °C | | | | |
| Maximum value of series protection | 25 A | | | | |

Mechanical parameters

| | |
|-----------------------------------|---------------------------------|
| Photovoltaic cell type | Monokrystaliczna, 182 mm, 10 BB |
| Photovoltaic cell dimensions [mm] | 182 x 182 |
| Number of cells in the panel | 120 (6x10 + 6x10) |
| Panel weight [kg] | 23,5 |
| Panel dimensions [mm] | 1909 x 1134 x 30 |
| Maximum load [Pascal] | 5400 |
| Connection box tightness | IP68 |
| Type of connector to be connected | Kompatybilne z MC4 |

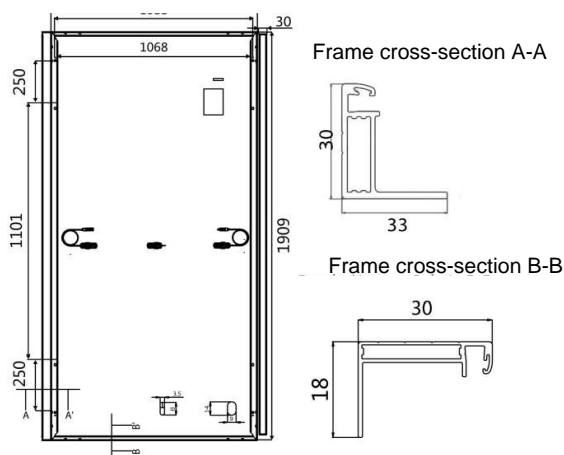
Electrical characteristics



Temperature characteristics

| | |
|---|--------------|
| Temperature coefficient Isc [CT Isc] | 0,05 % / °C |
| Temperature coefficient Voc [CT Voc]. | -0,28 % / °C |
| Temperature coefficient Pmax [CT Pmax]. | -0,36 % / °C |

Physical characteristics



Note: specifications are obtained under Standard Test Conditions (STC);
 Solar radiation 1000W/m².
 Air mass 1.5 and cell temperature 25°C.
 NOCT is obtained within the test conditions: 800 W/ m², ambient temperature 20°C, wind speed 1m/s, AM spectrum 1.5.
 For technical assistance contact techniczny@elum24.pl.
 These parameters are for reference only and are subject to change without prior notice.