

Dragonfly

SMH520J-12X12UW
520Watt



Ultra-light: By replacing the glass and optimising the framing, the module only weighs 4.1kg/m². 60% lighter than equivalent conventional glass modules.



Effortless installation: Module with the mounting structure pre-integrated. Eliminating the need for a traditional panel mounting structure. Saving time and installation cost.



Wide range of applications: Supports all types of installation method including roof adhesive mounting or removable mechanical mounting. Providing customers with more choices.



Safety: Integration with underlying installation surface, ensuring the water-proof performance and safety performance of the roof.



Durable: eArc is the first glassless module to pass the same durability standards as conventional glass modules, including IEC 61215:2016, IEC 61730:2016 and UL61730(USA).

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

25 Year Linear Power Warranty



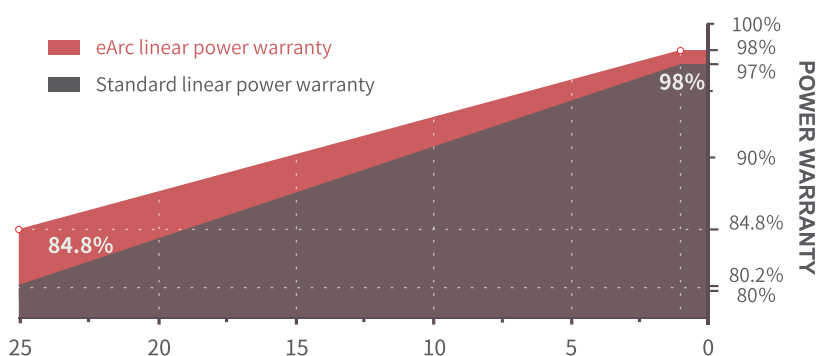
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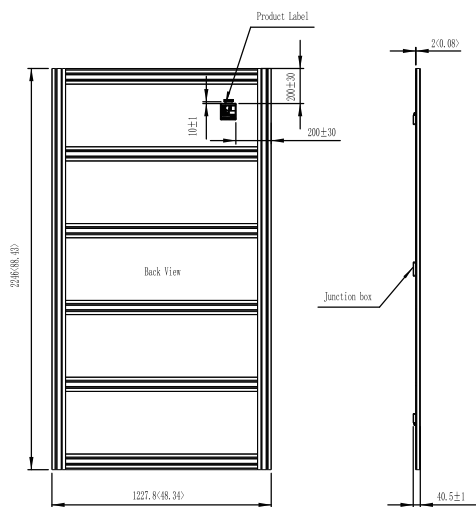
Media cooperation: marketing@sunman-energy.com



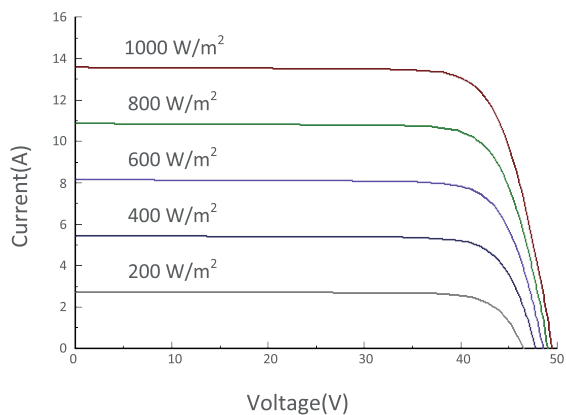
CAUTION: Read installation manual before using the product.
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DIMENSIONS



I-V CURVE (520)



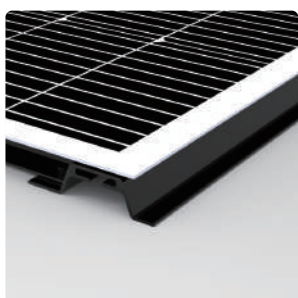
TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT) **41±2 °C**

Temperature Coefficient of P_{max} **-0.34 %/°C**

Temperature Coefficient of V_{oc} **-0.26 %/°C**

Temperature Coefficient of I_{sc} **0.033 %/°C**



SMHJW IEC EN 2023F 12

ELECTRICAL CHARACTERISTICS

STC	SMH520J-12X12UW
Maximum Power (P_{max})	520
Maximum Power Voltage (V_{mp})	42.3
Maximum Power Current (I_{mp})	12.31
Open-circuit Voltage (V_{oc})	49.5
Short-circuit Current (I_{sc})	13.56
Module Efficiency (%)	19.3
Operating Temperature	-40 °C to 85 °C
Maximum System Voltage	1500 V DC (IEC)
Maximum Series Fuse Rating	25 A
Application Class	Class A
Power Tolerance	0/+5 W

STC: Irradiance 1000W/m², Cell temperature 25 °C, AM=1.5.

NMOT	SMH520J-12X12UW
Maximum Power (P_{max})	429.2
Maximum Power Voltage (V_{mp})	41.8
Maximum Power Current (I_{mp})	10.26
Open-circuit Voltage (V_{oc})	49.8
Short-circuit Current (I_{sc})	10.82

NMOT: Irradiance 800W/m², Ambient temperature 20 °C, AM=1.5, Wind speed 1 m/s.

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon(182mm half cell)
No. of Cells	144 (12×12)
Module Dimensions	2246×1197×2 mm
Product Dimensions	2246×1227.8×40.5 mm
Weight	11.1kg
Backsheet	White
J-box	IP 68 rated
Output Cables	Photovoltaic cable 4.0 mm 2, (+)450 / (-)450 mm
Connector	MC4 compatible

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	34	34
Pieces per container	136	272