

eArc

SMF520J-12X12UW

520 Watt

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 7.7 kg, 70% lighter than conventional glass modules.



Fast-Installation: Through "Quick-Bonding" installation, eArc requires no penetration, reduces time on roof and saves installation costs.



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



Durable: eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL61730 (USA). eArc has also passed PID, salt mist level 8 tests.

POWER OUTPUT RANGE 520 W

POWER TOLERANCE 0-5 W

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

25 Year Linear Power Warranty



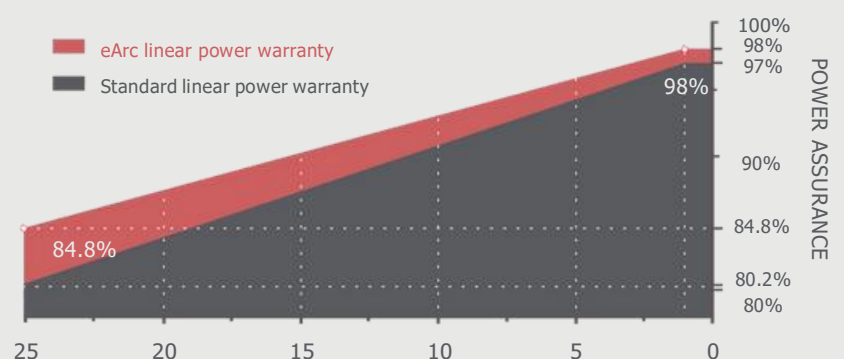
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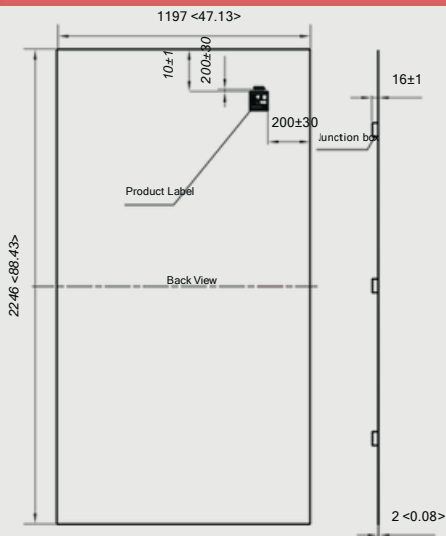
ULTRA-LIGHT & FLEXIBLE SOLAR PANEL

CAUTION: Read installation manual before using the product.

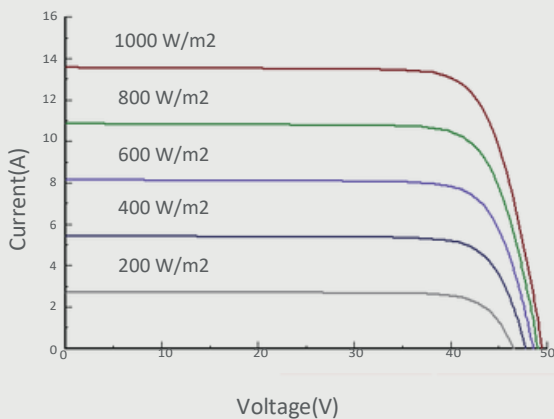
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DIMENSIONS



I-V CURVE (520)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT) $41 \pm 2^\circ\text{C}$

Temperature Coefficient of P_{max} $-0.34\% / ^\circ\text{C}$

Temperature Coefficient of V_{oc} $-0.26\% / ^\circ\text{C}$

Temperature Coefficient of I_{sc} $0.033\% / ^\circ\text{C}$



SMF520J IEC EN 2024B 9

ELECTRICAL CHARACTERISTICS

STC	SMF520J-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 $1000\text{W}/\text{m}^2$, Cell temperature 25°C , AM=1.5.

$^\circ\text{C}$, AM=1.5.

Tolerances of P_{max} , V_{oc} and I_{sc} are within $\pm 5\%$

NMOT	SMF520J-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 $800\text{W}/\text{m}^2$, 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 (12x12)
Module Dimensions	2246x1197x2 mm
Weight	7.7kg $\pm 3\%$
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm $2 \times (+)450 / (-)450$ mm
Connector	MC4-EVO2

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	66	66&50
Pieces per container	264	828