

eArc

SMF520J-12X12UW

520 Watt

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 8.6 kg, 70% lighter than conventional glass modules.



Fast-Installation: Through "Quick-Bonding" installation, eArc requires no penetration, reduces time on roof by 40% and eliminates the use of mounting hardware.



Aesthetic: Seamless integration with underlying installation surface.



Durable: eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL1703 (USA). eArc has also passed PID, salt mist and ammonia corrosion tests.

POWER OUTPUT RANGE 520 W

POWER TOLERANCE 0-5 W

12 Year Product Warranty

25 Year Linear Power Warranty

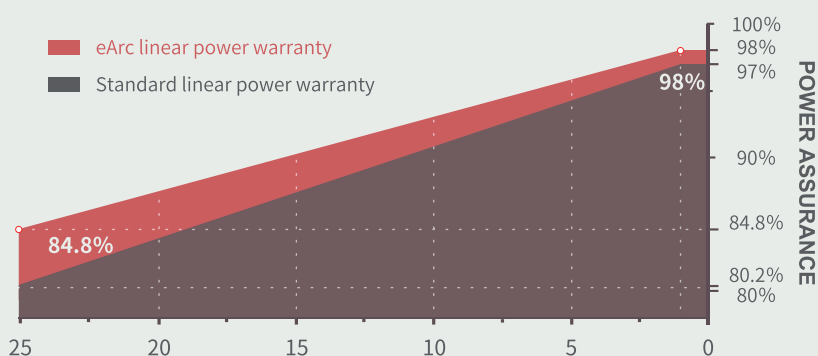


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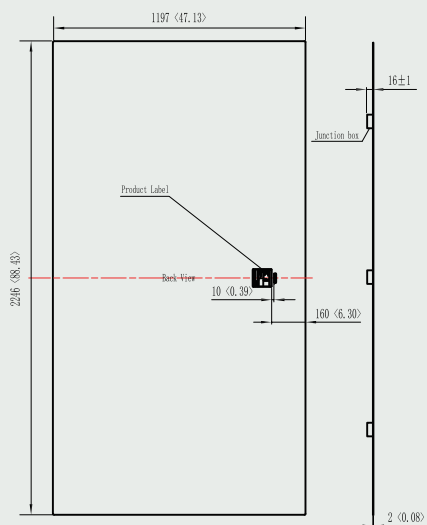
LINEAR PERFORMANCE WARRANTY

CAUTION: Read installation manual before using the product.

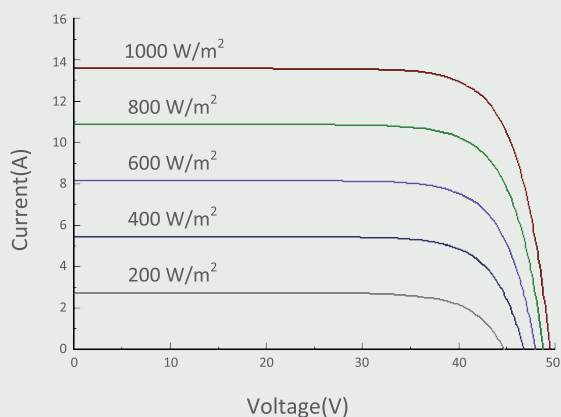
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DIMENSIONS



I-V CURVE (520)



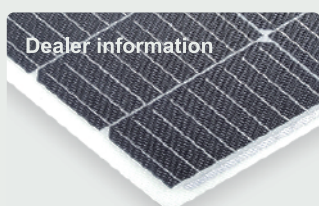
TEMPERATURE CHARACTERISTICS

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

Temperature Coefficient of P_{max} **-0.38 %/°C**

Temperature Coefficient of V_{oc} **-0.28 %/°C**

Temperature Coefficient of I_{sc} **0.020 %/°C**



SMF520J IEC EN 2023A 1

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

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

NMOT	SMF520J-12X12UW
Maximum Power (P_{max})	429.8
Maximum Power Voltage (V_{mp})	41.8
Maximum Power Current (I_{mp})	10.28
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
Weight	8.6kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)450 / (-)450 mm
Connector	MC4 compatible

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	/	/
Pieces per container	/	/