

eArc

SMF430F-12X12UW

430 Watt

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 6.3 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 425~430 W

POWER TOLERANCE 0-5 W

12 Year Product Warranty

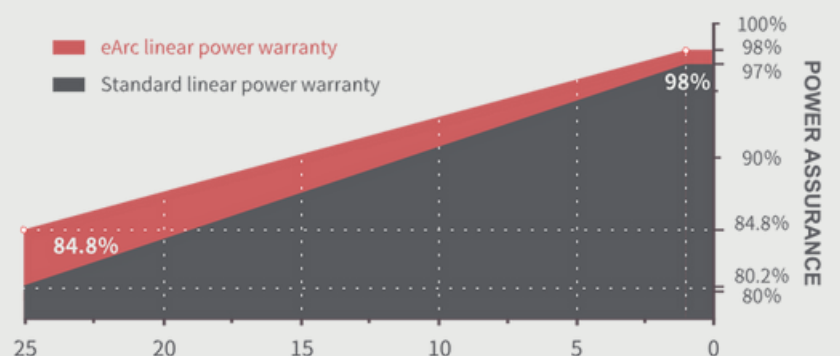
25 Year Linear Power Warranty



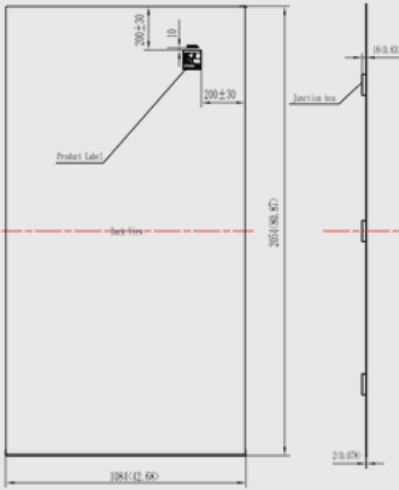
www.sunmanafrika.co.za
sales@sunmanafrika.co.za

LINEAR PERFORMANCE WARRANTY

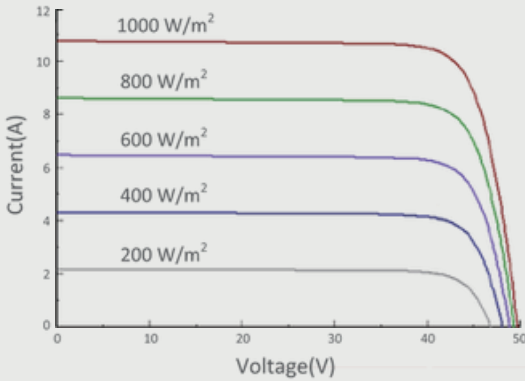
CAUTION: Read installation manual before using the product.
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DIMENSIONS



I-V CURVE (430)



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



SMF/UW/IEC EN 2023C 6

ELECTRICAL CHARACTERISTICS

STC	SMF425F-12X12UW	SMF430F-12X12UW
Maximum Power (P_{max})	425	430
Maximum Power Voltage (V_{mp})	41.8	42.0
Maximum Power Current (I_{mp})	10.17	10.24
Open-circuit Voltage (V_{oc})	49.6	49.8
Short-circuit Current (I_{sc})	10.67	10.74
Module Efficiency (%)	19.1	19.3
Operating Temperature	-40 °C to 85 °C	
Maximum System Voltage	1500 V DC (IEC)	
Maximum Series Fuse Rating	20 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	SMF425F-12X12UW	SMF430F-12X12UW
Maximum Power (P_{max})	321.4	325.1
Maximum Power Voltage (V_{mp})	38.6	38.8
Maximum Power Current (I_{mp})	8.33	8.38
Open-circuit Voltage (V_{oc})	46.6	46.8
Short-circuit Current (I_{sc})	8.64	8.69

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

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon(166mm half cell)
No. of Cells	144 (12×12)
Module Dimensions	2054×1084×2 mm
Weight	6.3kg
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	66+50	66
Pieces per container	580	1320