

**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, 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**

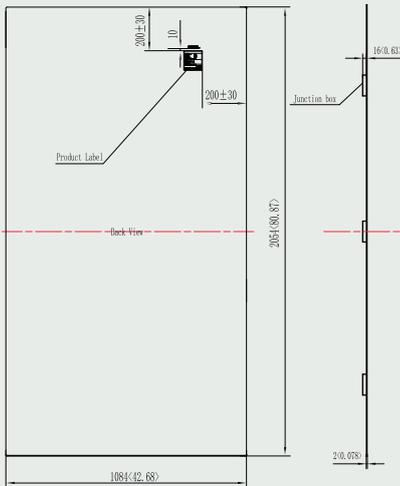
**25 Year Linear Power Warranty**



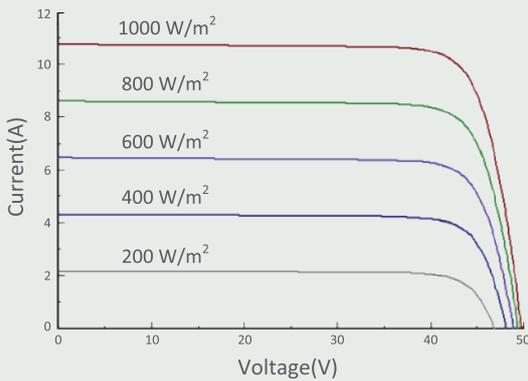
**LINEAR PERFORMANCE WARRANTY**



## DIMENSIONS



## I-V CURVE (430)



## TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT)	41±2 °C
Temperature Coefficient of P <sub>max</sub>	-0.38 %/°C
Temperature Coefficient of V <sub>oc</sub>	-0.28 %/°C
Temperature Coefficient of I <sub>sc</sub>	0.020 %/°C



SMF-UW IEC EN 2023C 6

## ELECTRICAL CHARACTERISTICS

STC	SMF425F-12X12UW	SMF430F-12X12UW
Maximum Power (P <sub>max</sub> )	425	430
Maximum Power Voltage (V <sub>mp</sub> )	41.8	42.0
Maximum Power Current (I <sub>mp</sub> )	10.17	10.24
Open-circuit Voltage (V <sub>oc</sub> )	49.6	49.8
Short-circuit Current (I <sub>sc</sub> )	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/m<sup>2</sup>, Cell Temperature 25 °C, AM=1.5. Tolerances of P<sub>max</sub>, V<sub>oc</sub> and I<sub>sc</sub> are within ±5%

NMOT	SMF425F-12X12UW	SMF430F-12X12UW
Maximum Power (P <sub>max</sub> )	321.4	325.1
Maximum Power Voltage (V <sub>mp</sub> )	38.6	38.8
Maximum Power Current (I <sub>mp</sub> )	8.33	8.38
Open-circuit Voltage (V <sub>oc</sub> )	46.6	46.8
Short-circuit Current (I <sub>sc</sub> )	8.64	8.69

NMOT: Irradiance 800W/m<sup>2</sup>, 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