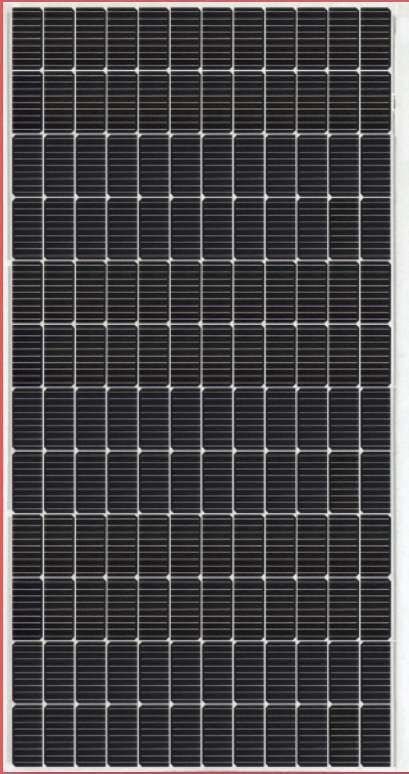


eArc

SMF430F-12X12DW

430 Watt

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 7.3 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.

POWER OUTPUT RANGE 425~430 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

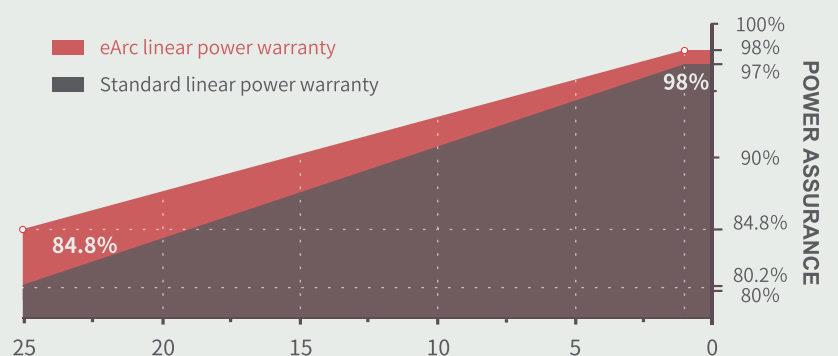
25 Year Linear Power Warranty



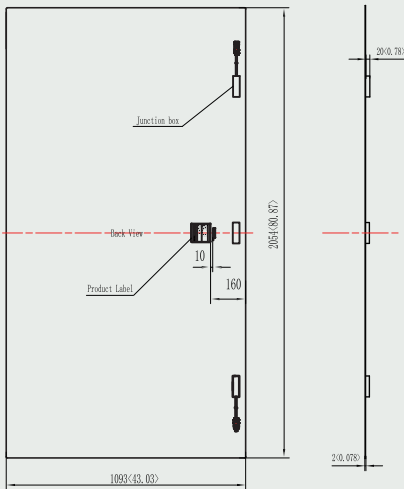
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

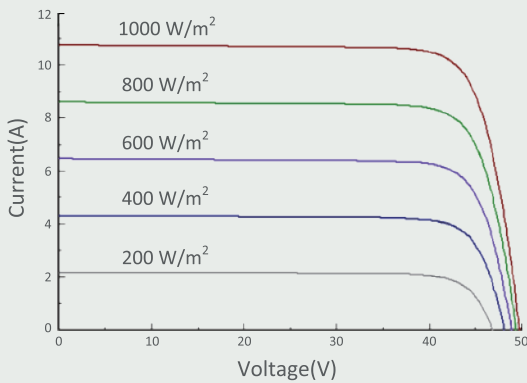
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DIMENSIONS



I-V CURVE (430)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NOMT)	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 Series has been certified to install on color-bond steel roof sheeting and Zincalume. Any other roof sheeting install requires consultation with Sunman or its local importer. Installation of SMF series requires sika™Sikalik SG 20 Silicone Adhesive.

SMFDW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF425F-12X12DW	SMF430F-12X12DW
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 (%)	18.9	19.2
Operating Temperature	-40 °C to 85 °C	
Maximum System Voltage	1000 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-12X12DW	SMF430F-12X12DW
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	2054×1093×2 mm
Weight	7.3kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)150 / (-)450 mm

Connector Dawning: C1 

PACKAGING CONFIGURATION

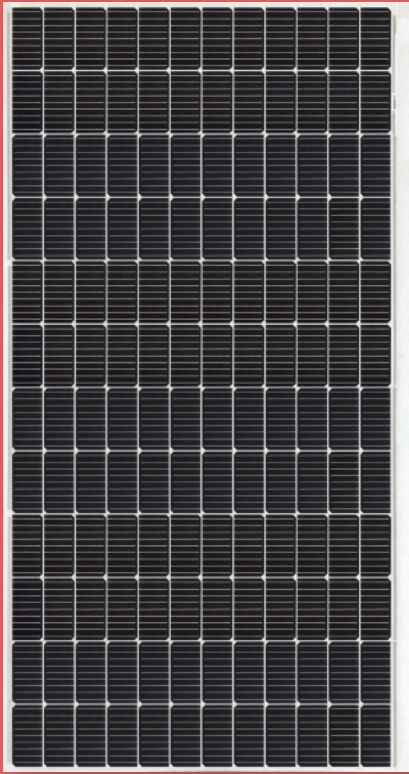
	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	580	1320

eArc

SMF440F-12X12DW

440 Watt

144 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 7.3 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.

POWER OUTPUT RANGE 435~440 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

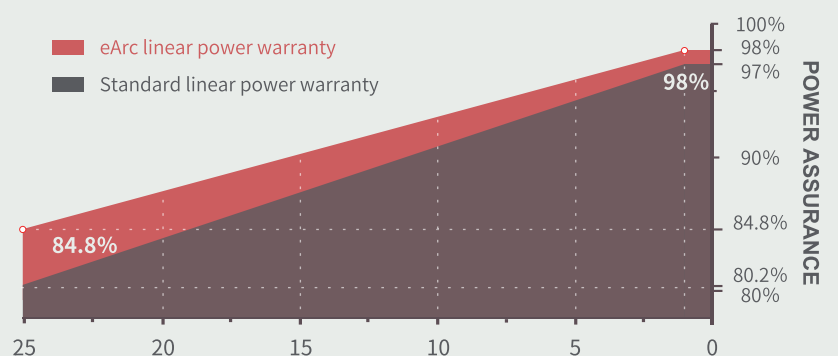
25 Year Linear Power Warranty



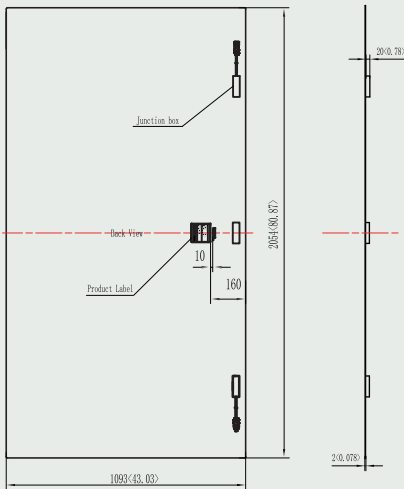
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

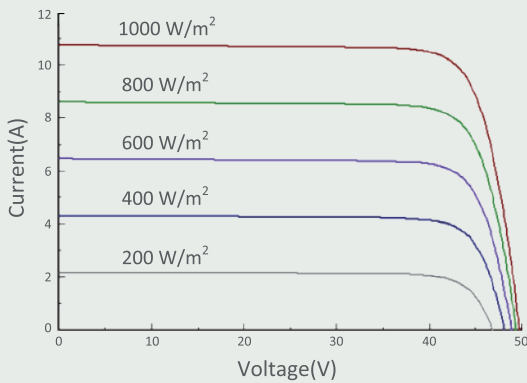
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DIMENSIONS



I-V CURVE (430)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NOMT)	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 Series has been certified to install on color-bond steel roof sheeting and Zincalume. Any other roof sheeting install requires consultation with Sunman or its local importer. Installation of SMF series requires sika™Sikasil SG 20 Silicone Adhesive.

SMFDW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF435F-12X12DW	SMF440F-12X12DW
Maximum Power (P_{max})	435	440
Maximum Power Voltage (V_{mp})	42.2	42.4
Maximum Power Current (I_{mp})	10.31	10.38
Open-circuit Voltage (V_{oc})	50.0	50.2
Short-circuit Current (I_{sc})	10.81	10.88
Module Efficiency (%)	19.4	19.6
Operating Temperature	-40 °C to 85 °C	
Maximum System Voltage	1000 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	SMF435F-12X12DW	SMF440F-12X12DW
Maximum Power (P_{max})	328.9	332.7
Maximum Power Voltage (V_{mp})	39.0	39.1
Maximum Power Current (I_{mp})	8.44	8.51
Open-circuit Voltage (V_{oc})	47.0	47.1
Short-circuit Current (I_{sc})	8.75	8.82

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	2054×1093×2 mm
Weight	7.3kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)150 / (-)450 mm

Connector Dawning: C1 

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	580	1320