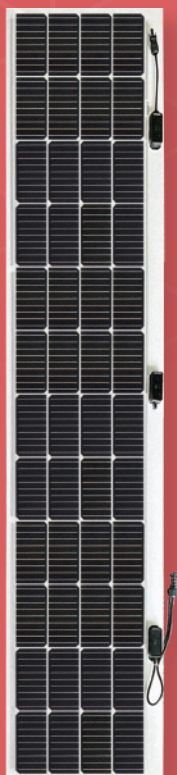


eArc

SMF140F-12X04UW

140 Watt

48 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 2.8 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 135~140 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

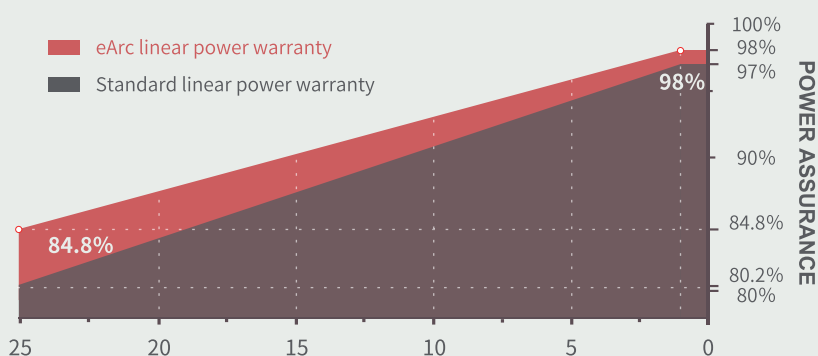
25 Year Linear Power Warranty



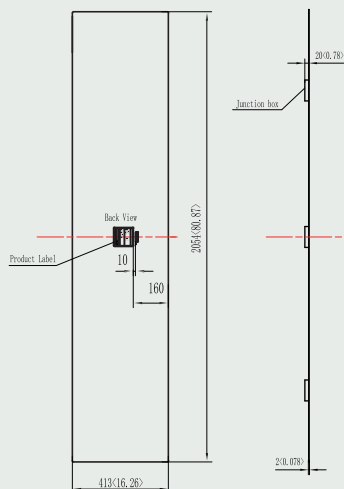
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

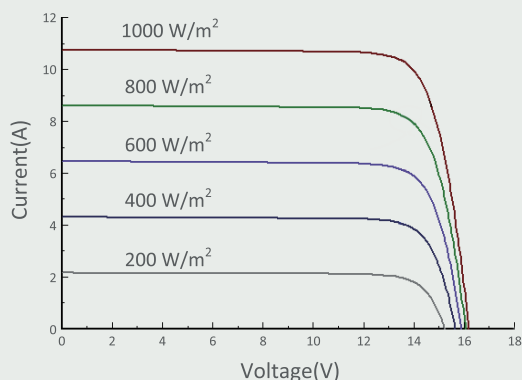
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DIMENSIONS



I-V CURVE (140)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF135F-12X04UW	SMF140F-12X04UW
Maximum Power (P _{max})	135	140
Maximum Power Voltage (V _{mp})	13.4	13.6
Maximum Power Current (I _{mp})	10.08	10.30
Open-circuit Voltage (V _{oc})	16.0	16.2
Short-circuit Current (I _{sc})	10.54	10.76
Module Efficiency (%)	15.9	16.5
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/m ² , Cell temperature 25 °C, AM=1.5.		
Tolerances of P _{max} , V _{oc} and I _{sc} are within ±5%		

NMOT	SMF135F-12X04UW	SMF140F-12X04UW
Maximum Power (P_{max})	102.1	105.9
Maximum Power Voltage (V_{mp})	12.4	12.6
Maximum Power Current (I_{mp})	8.24	8.41
Open-circuit Voltage (V_{oc})	15.0	15.2
Short-circuit Current (I_{sc})	8.54	8.71

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	48 (12×4)
Module Dimensions	2054×413×2 mm
Weight	2.8kg
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

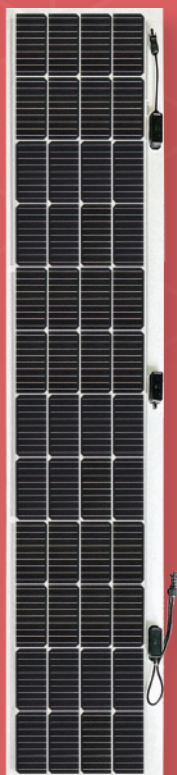
	20' GP	40' HC
Module per pallet	132	132
Pieces per container	1320	2640

eArc

SMF145F-12X04UW

145 Watt

48 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 2.8 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 140~145 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

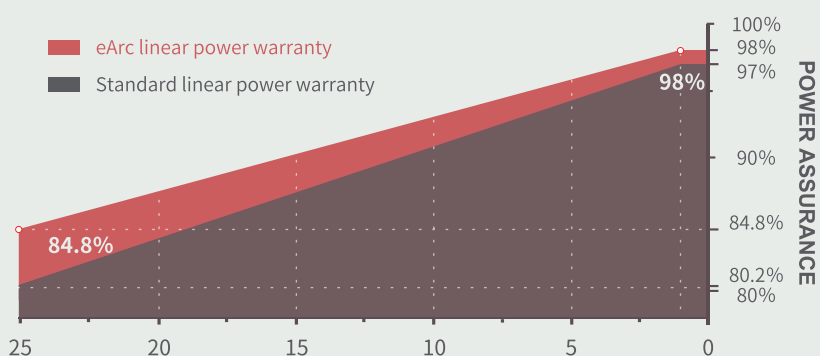
25 Year Linear Power Warranty



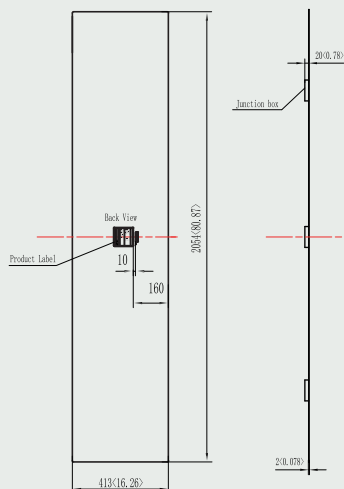
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

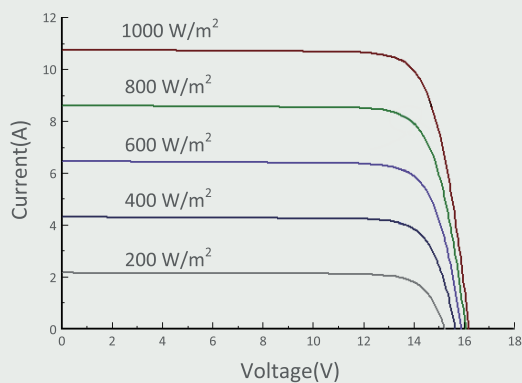
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DIMENSIONS



I-V CURVE (140)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF140F-12X04UW	SMF145F-12X04UW
Maximum Power (P_{max})	140	145
Maximum Power Voltage (V_{mp})	13.6	13.8
Maximum Power Current (I_{mp})	10.30	10.51
Open-circuit Voltage (V_{oc})	16.2	16.4
Short-circuit Current (I_{sc})	10.76	10.97
Module Efficiency (%)	16.5	17.1
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	SMF140F-12X04UW	SMF145F-12X04UW
Maximum Power (P_{max})	105.9	109.7
Maximum Power Voltage (V_{mp})	12.6	12.8
Maximum Power Current (I_{mp})	8.41	8.58
Open-circuit Voltage (V_{oc})	15.2	15.4
Short-circuit Current (I_{sc})	8.71	8.88

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	48 (12×4)
Module Dimensions	2054×413×2 mm
Weight	2.8kg
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	132	132
Pieces per container	1320	2640

eArc

SMF285F-12X08UW

285 Watt

96 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 5.0 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 280~285 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

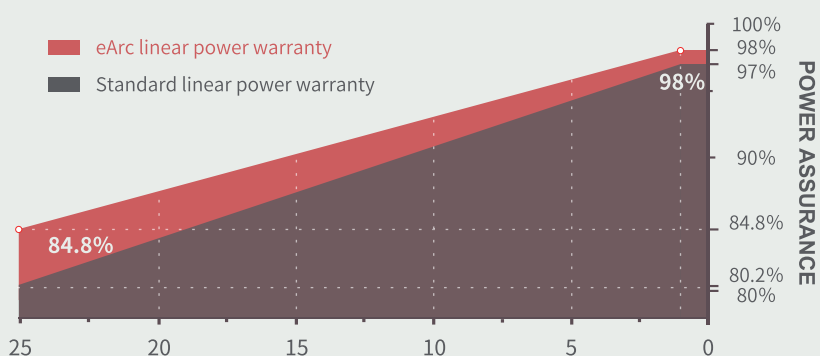
25 Year Linear Power Warranty



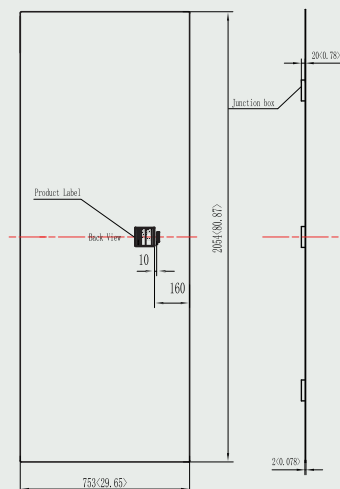
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

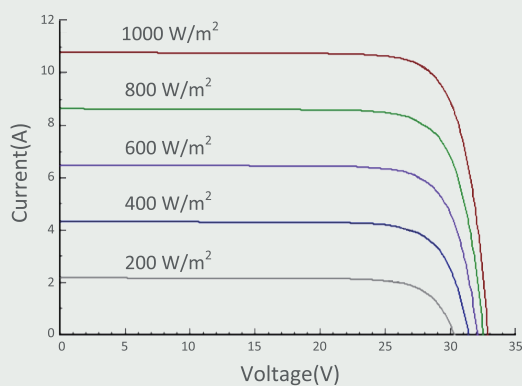
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DIMENSIONS



I-V CURVE (285)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF280F-12X08UW	SMF285F-12X08UW
Maximum Power (P_{max})	280	285
Maximum Power Voltage (V_{mp})	27.5	27.7
Maximum Power Current (I_{mp})	10.19	10.29
Open-circuit Voltage (V_{oc})	32.7	32.9
Short-circuit Current (I_{sc})	10.68	10.78
Module Efficiency (%)	18.1	18.4
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	SMF280F-12X08UW	SMF285F-12X08UW
Maximum Power (P_{max})	211.7	215.5
Maximum Power Voltage (V_{mp})	25.4	25.6
Maximum Power Current (I_{mp})	8.34	8.42
Open-circuit Voltage (V_{oc})	30.7	30.9
Short-circuit Current (I_{sc})	8.64	8.72

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	96 (12×8)
Module Dimensions	2054×753×2 mm
Weight	5.0kg
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	66+30
Pieces per container	660	1620

eArc

SMF290F-12X08UW

290 Watt

96 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 5.0 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 285~290 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

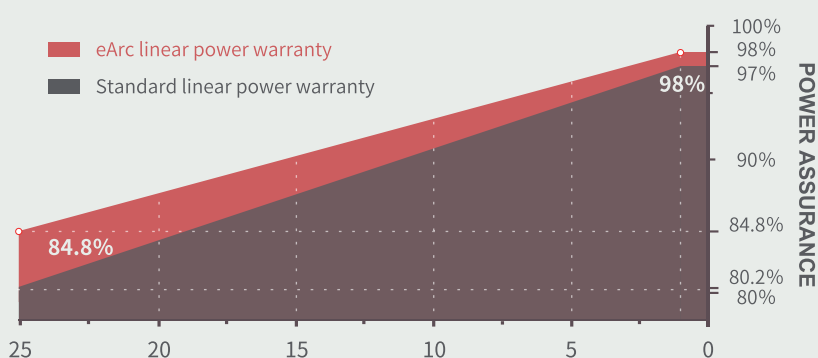
25 Year Linear Power Warranty



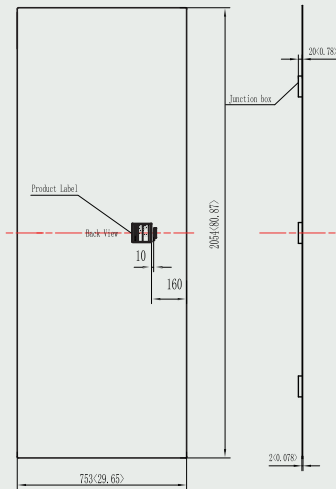
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

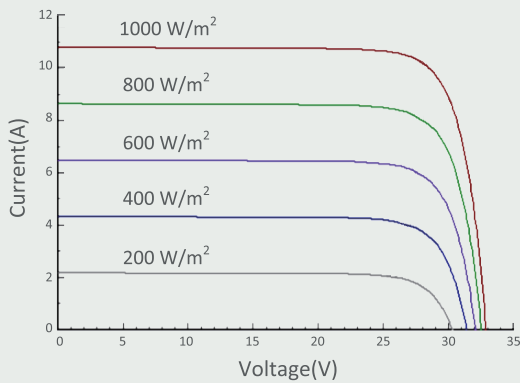
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DIMENSIONS



I-V CURVE (285)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF285F-12X08UW	SMF290F-12X08UW
Maximum Power (P _{max})	285	290
Maximum Power Voltage (V _{mp})	27.7	27.9
Maximum Power Current (I _{mp})	10.29	10.40
Open-circuit Voltage (V _{oc})	32.9	33.1
Short-circuit Current (I _{sc})	10.78	10.90
Module Efficiency (%)	18.4	18.8
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	SMF285F-12X08UW	SMF290F-12X08UW
Maximum Power (P_{max})	215.5	219.3
Maximum Power Voltage (V_{mp})	25.6	25.8
Maximum Power Current (I_{mp})	8.42	8.51
Open-circuit Voltage (V_{oc})	30.9	31.1
Short-circuit Current (I_{sc})	8.72	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	96 (12×8)
Module Dimensions	2054×753×2 mm
Weight	5.0kg
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	66+30
Pieces per container	660	1620

eArc

SMF320F-12X09UW

320 Watt

108 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 5.9 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 315~320 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

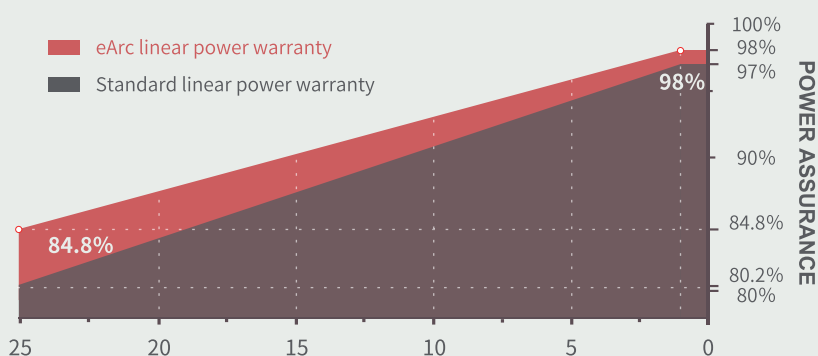
25 Year Linear Power Warranty



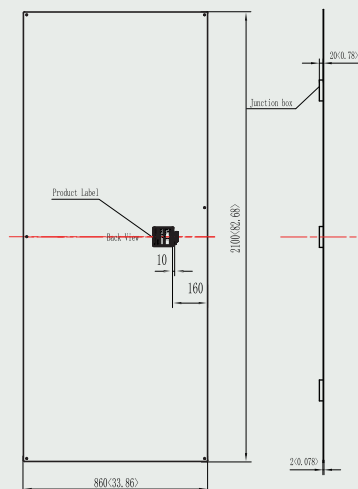
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

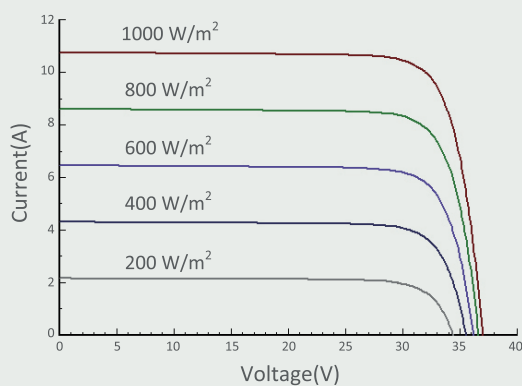
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DIMENSIONS



I-V CURVE (320)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF315F-12X09UW	SMF320F-12X09UW
Maximum Power (P_{max})	315	320
Maximum Power Voltage (V_{mp})	31.0	31.2
Maximum Power Current (I_{mp})	10.17	10.26
Open-circuit Voltage (V_{oc})	36.8	37.0
Short-circuit Current (I_{sc})	10.67	10.76
Module Efficiency (%)	17.4	17.7
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	SMF315F-12X09UW	SMF320F-12X09UW
Maximum Power (P_{max})	238.2	242.0
Maximum Power Voltage (V_{mp})	28.6	28.8
Maximum Power Current (I_{mp})	8.33	8.41
Open-circuit Voltage (V_{oc})	34.5	34.7
Short-circuit Current (I_{sc})	8.65	8.73

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	108 (12×9)
Module Dimensions	2100×860×2 mm
Weight	5.9kg
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	66+30
Pieces per container	660	1620

eArc

SMF330F-12X09UW

330 Watt

108 Half Cell Monocrystalline Module



Ultra-light: Glass free module weighs 5.9 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 325~330 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty

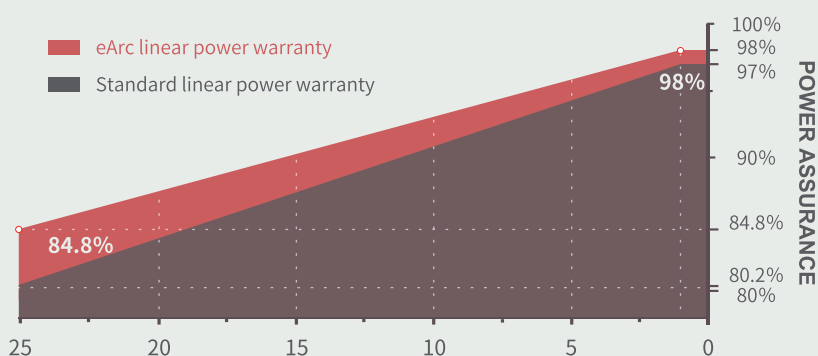
25 Year Linear Power Warranty



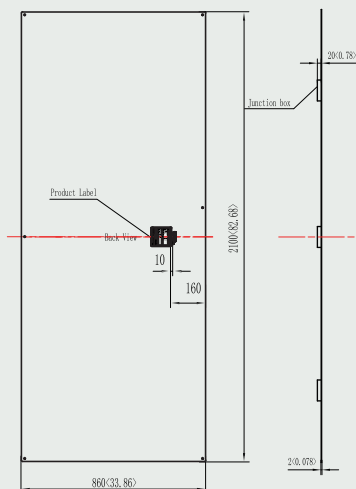
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

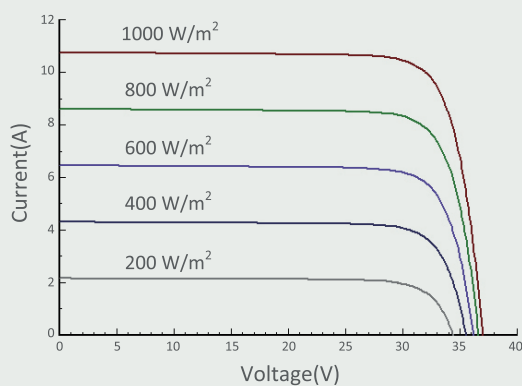
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DIMENSIONS



I-V CURVE (320)



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF325F-12X09UW	SMF330F-12X09UW
Maximum Power (P_{max})	325	330
Maximum Power Voltage (V_{mp})	31.4	31.6
Maximum Power Current (I_{mp})	10.36	10.45
Open-circuit Voltage (V_{oc})	37.2	37.4
Short-circuit Current (I_{sc})	10.86	10.95
Module Efficiency (%)	18.0	18.3
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/m ² , Cell temperature 25 °C , AM=1.5.		
Tolerances of P_{max} , V_{oc} and I_{sc} are within ±5%		

NMOT	SMF325F-12X09UW	SMF330F-12X09UW
Maximum Power (P_{max})	245.8	249.6
Maximum Power Voltage (V_{mp})	29.0	29.2
Maximum Power Current (I_{mp})	8.48	8.55
Open-circuit Voltage (V_{oc})	34.9	35.1
Short-circuit Current (I_{sc})	8.80	8.87

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	108 (12×9)
Module Dimensions	2100×860×2 mm
Weight	5.9kg
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

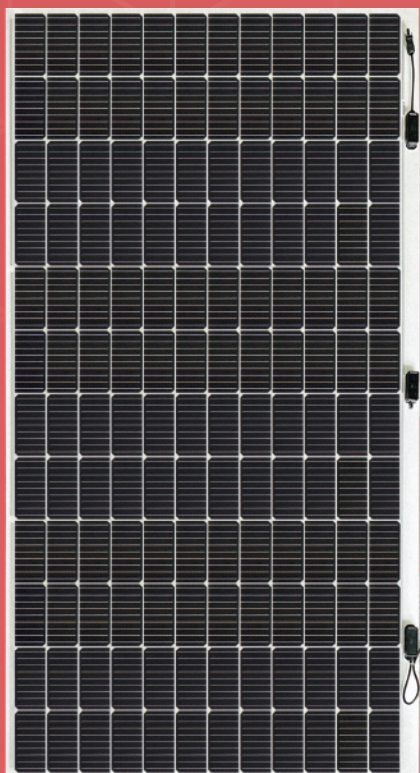
	20' GP	40' HC
Module per pallet	66	66+30
Pieces per container	660	1620

eArc

SMF430F-12X12UW

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

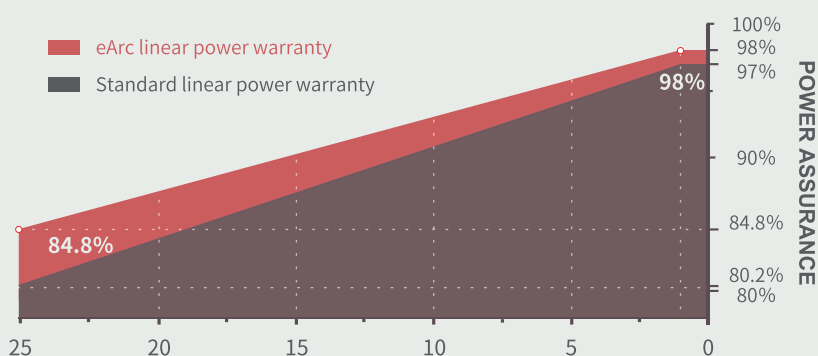
25 Year Linear Power Warranty



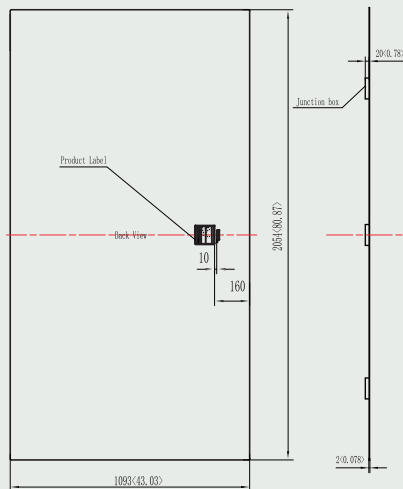
www.sunman-energy.com

CAUTION: Read installation manual before using the product.

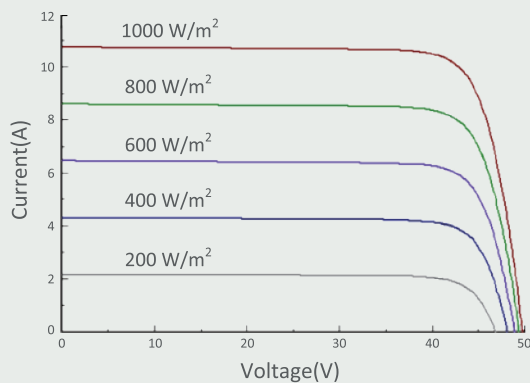
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DIMENSIONS



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021A

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 (%)	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-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	2054×1093×2 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

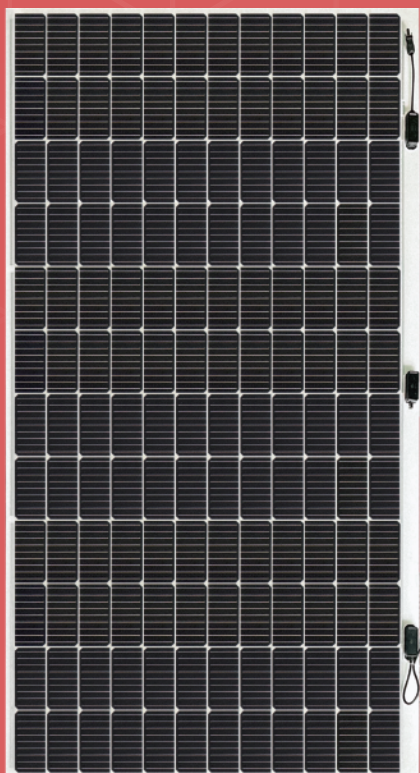
	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	580	1320

eArc

SMF440F-12X12UW

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

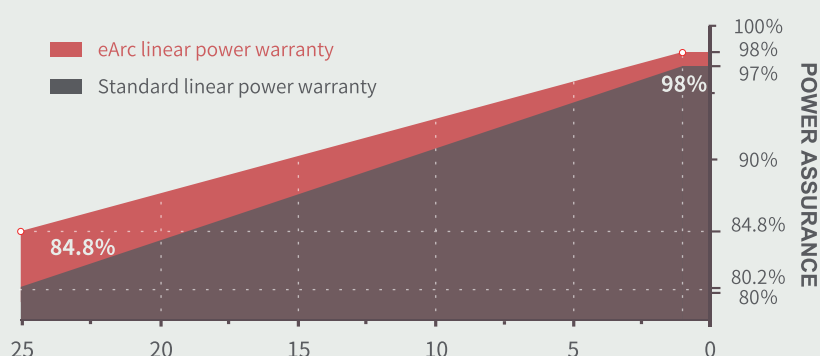
25 Year Linear Power Warranty



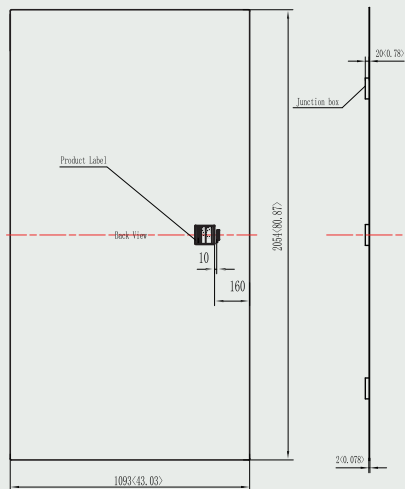
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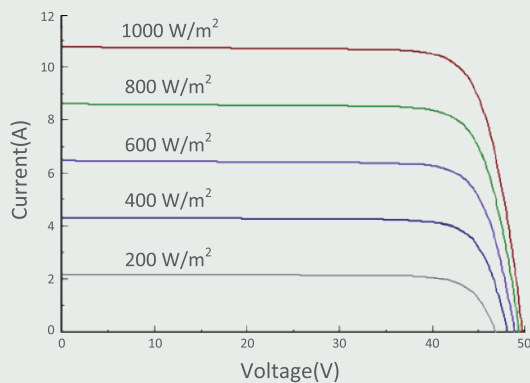
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DIMENSIONS



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 sikaTMSikasil SG 20 Silicone Adhesive.

SMF-UW IEC AU 2021B

ELECTRICAL CHARACTERISTICS

STC	SMF435F-12X12UW	SMF440F-12X12UW
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-12X12UW	SMF440F-12X12UW
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