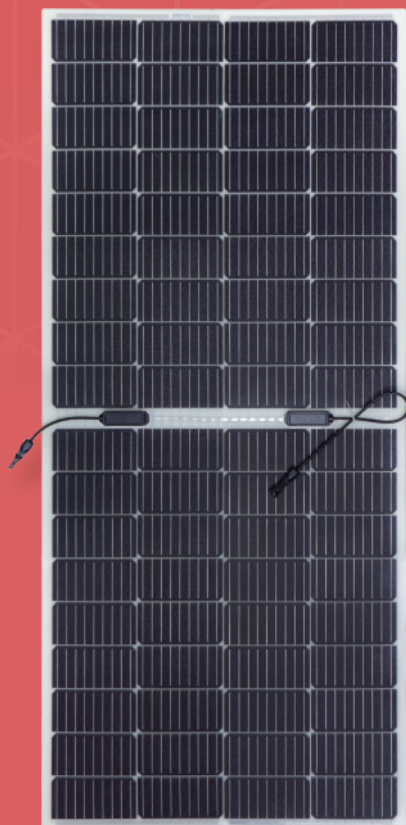


# eArc

## SMF215F-4X18UW

# 215 Watt

## 72 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 3.8 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 210~215 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

**LINEAR PERFORMANCE WARRANTY**

**10 Year Product Warranty**

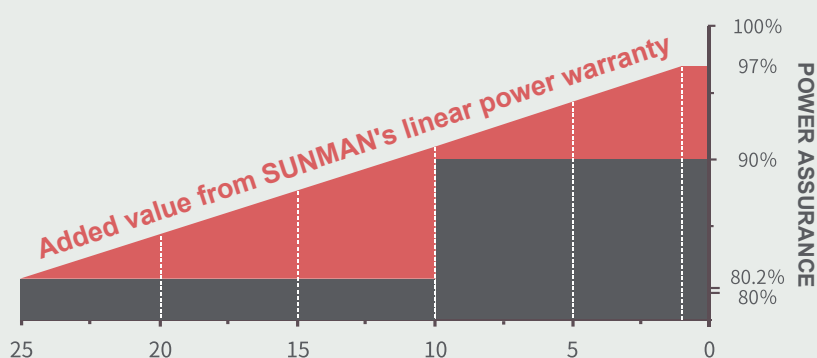
**25 Year Linear Power Warranty**



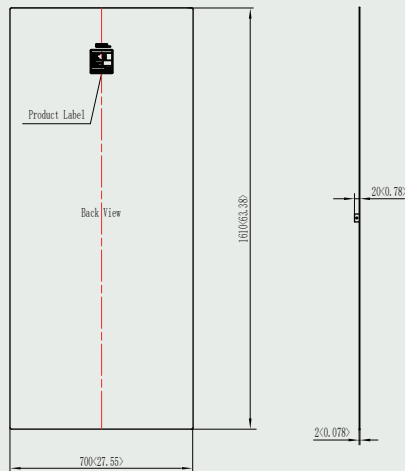
[www.sunman-energy.com](http://www.sunman-energy.com)

CAUTION: Read installation manual before using the product.

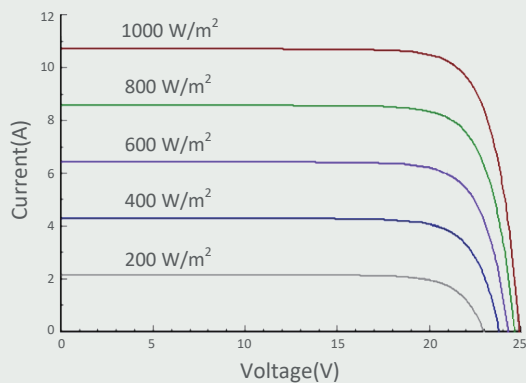
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## DIMENSIONS



## I-V CURVE (215)



## 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



SMD and SMF series panels have been certified to installed on Colorbond roof sheeting and Zincalume.  
Any other roof sheeting install requires consultation with Sunman or its local importer.  
Installation of SMD and SMF series panels require Sika Sikasil SG-20 or Tonsan 1527.  
Mounting module with clamps is not suitable.  
Please refer to installation manual for mounting method.

SMF-UW IEC AU 2021A

## ELECTRICAL CHARACTERISTICS

STC	SMF210F-4X18UW	SMF215F-4X18UW
Maximum Power ( $P_{max}$ )	210	215
Maximum Power Voltage ( $V_{mp}$ )	20.8	21.0
Maximum Power Current ( $I_{mp}$ )	10.10	10.24
Open-circuit Voltage ( $V_{oc}$ )	24.7	24.9
Short-circuit Current ( $I_{sc}$ )	10.58	10.72
Module Efficiency (%)	18.6	19.1
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	SMF210F-4X18UW	SMF215F-4X18UW
Maximum Power ( $P_{max}$ )	158.8	162.6
Maximum Power Voltage ( $V_{mp}$ )	19.2	19.4
Maximum Power Current ( $I_{mp}$ )	8.28	8.39
Open-circuit Voltage ( $V_{oc}$ )	23.2	23.4
Short-circuit Current ( $I_{sc}$ )	8.57	8.68

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	72 (4×18)
Module Dimensions	1610×700×2 mm
Weight	3.8kg
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	66+50	66
Pieces per container	972	2574

# eArc

## SMF285F-4X24UW

# 285 Watt

## 96 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 4.9 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 280~285 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

**LINEAR PERFORMANCE WARRANTY**

**10 Year Product Warranty**

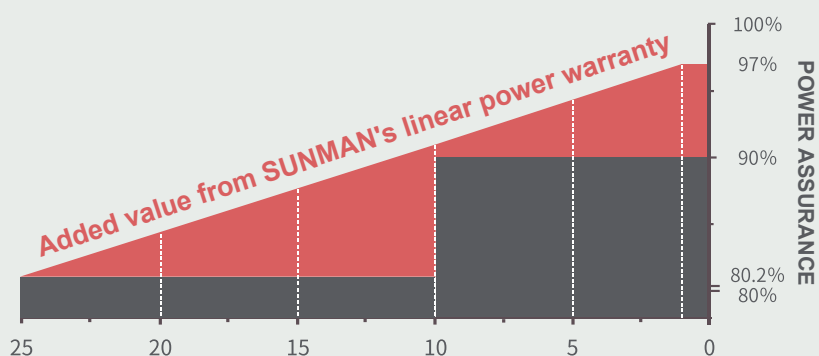
**25 Year Linear Power Warranty**



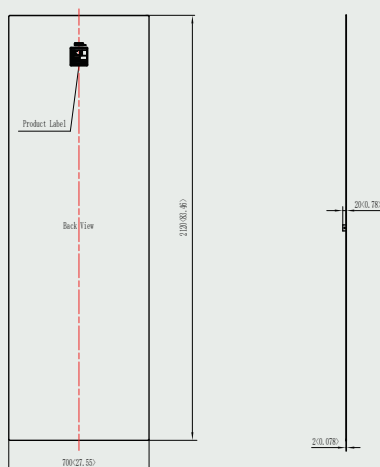
[www.sunman-energy.com](http://www.sunman-energy.com)

CAUTION: Read installation manual before using the product.

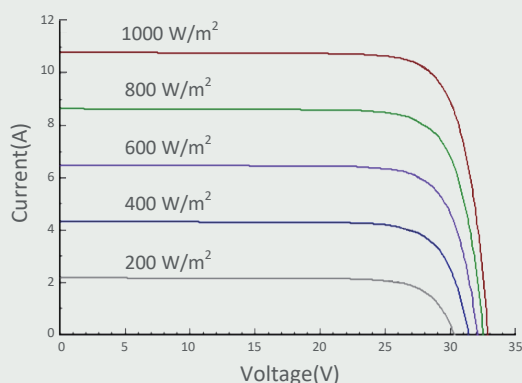
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## DIMENSIONS



## 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**



SMD and SMF series panels have been certified to installed on Colorbond roof sheeting and Zincalume. Any other roof sheeting install requires consultation with Sunman or its local importer. Installation of SMD and SMF series panels require Sika Sikasil SG-20 or Tonsan 1527. Mounting module with clamps is not suitable. Please refer to installation manual for mounting method.

SMF-UW IEC AU 2021A

## ELECTRICAL CHARACTERISTICS

STC	SMF280F-4X24UW	SMF285F-4X24UW
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 (%)	18.9	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/m <sup>2</sup> , Cell temperature 25 °C , AM=1.5.		
Tolerances of $P_{max}$ , $V_{oc}$ and $I_{sc}$ are within ±5%		

NMOT	SMF280F-4X24UW	SMF285F-4X24UW
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 (4×24)
Module Dimensions	2120×700×2 mm
Weight	4.9kg
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

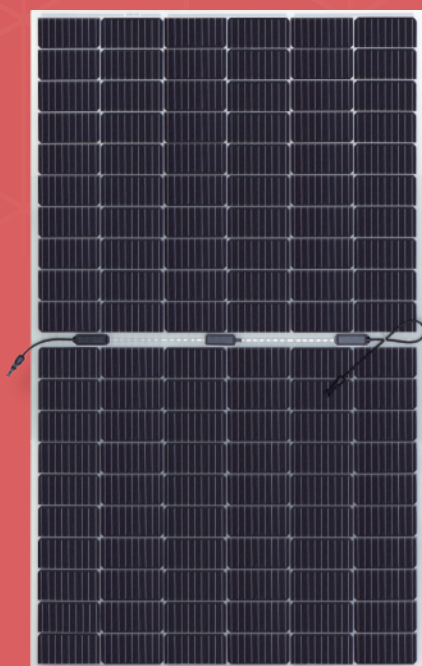
	20' GP	40' HC
Module per pallet	66+50	66
Pieces per container	810	1980

# eArc

## SMF360F-6X20UW

# 360 Watt

## 120 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 6.1 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 355~360 W

POWER TOLERANCE 0-5 W

MADE IN CHINA

**LINEAR PERFORMANCE WARRANTY**

**10 Year Product Warranty**

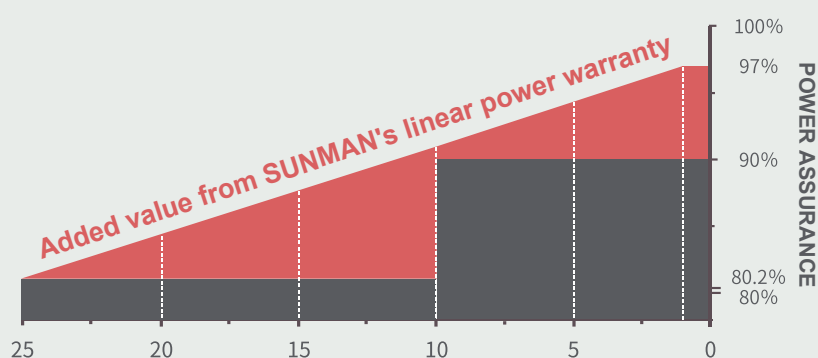
**25 Year Linear Power Warranty**



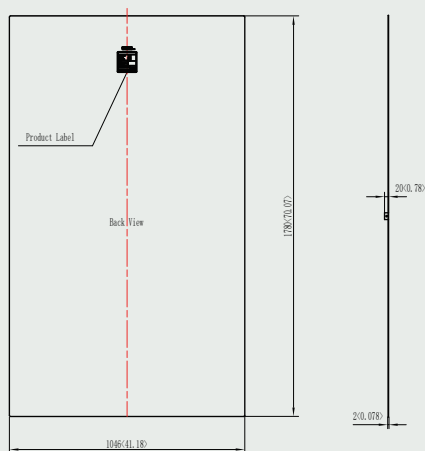
[www.sunman-energy.com](http://www.sunman-energy.com)

CAUTION: Read installation manual before using the product.

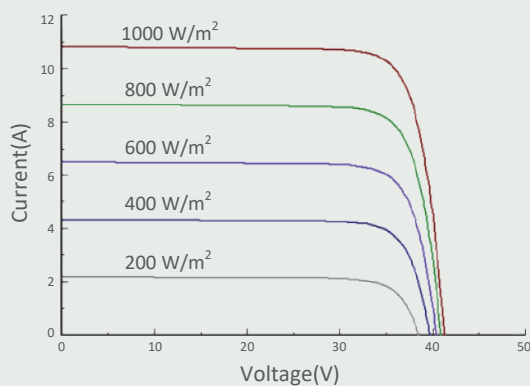
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## DIMENSIONS



## I-V CURVE (360)



## 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**



SMD and SMF series panels have been certified to installed on Colorbond roof sheeting and Zincalume. Any other roof sheeting install requires consultation with Sunman or its local importer. Installation of SMD and SMF series panels require Sika Sikasil SG-20 or Tonsan 1527. Mounting module with clamps is not suitable. Please refer to installation manual for mounting method.

SMF-UW IEC AU 2021A

## ELECTRICAL CHARACTERISTICS

STC	SMF355F-6X20UW	SMF360F-6X20UW
Maximum Power ( $P_{max}$ )	355	360
Maximum Power Voltage ( $V_{mp}$ )	34.7	34.9
Maximum Power Current ( $I_{mp}$ )	10.24	10.32
Open-circuit Voltage ( $V_{oc}$ )	41.1	41.3
Short-circuit Current ( $I_{sc}$ )	10.72	10.82
Module Efficiency (%)	19.1	19.3
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 <sup>2</sup> , Cell temperature 25 °C , AM=1.5.		
Tolerances of $P_{max}$ , $V_{oc}$ and $I_{sc}$ are within ±5%		

NMOT	SMF355F-6X20UW	SMF360F-6X20UW
Maximum Power ( $P_{max}$ )	268.4	272.2
Maximum Power Voltage ( $V_{mp}$ )	32.0	32.2
Maximum Power Current ( $I_{mp}$ )	8.39	8.46
Open-circuit Voltage ( $V_{oc}$ )	38.6	38.8
Short-circuit Current ( $I_{sc}$ )	8.69	8.77
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	120 (6×20)
Module Dimensions	1780×1046×2 mm
Weight	6.1kg
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	696	1584



# eArc

## SMF430F-6X24UW

# 430 Watt

## 144 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 7.2 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**

**10 Year Product Warranty**

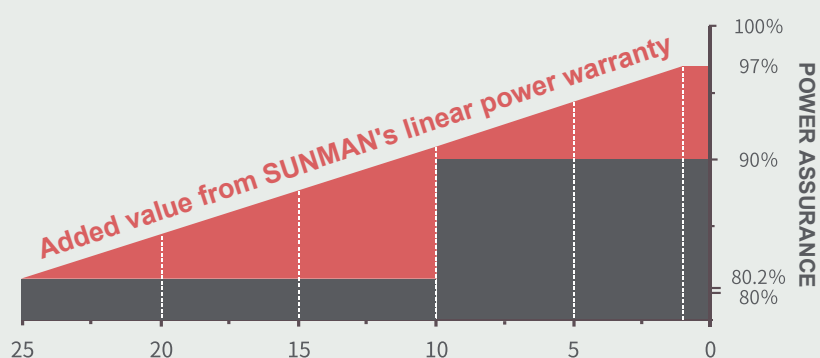
**25 Year Linear Power Warranty**



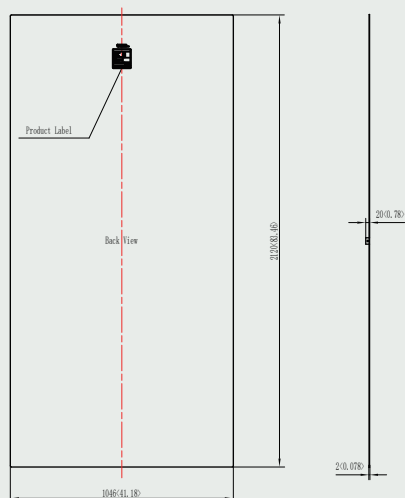
[www.sunman-energy.com](http://www.sunman-energy.com)

CAUTION: Read installation manual before using the product.

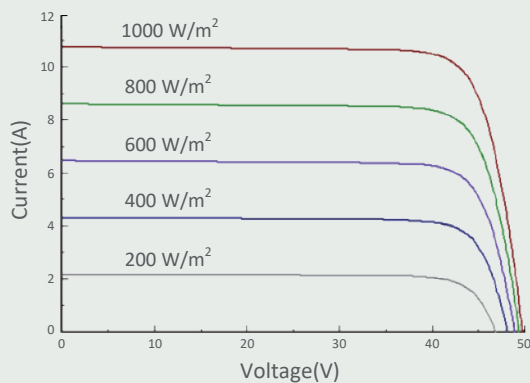
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## DIMENSIONS



## 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



SMD and SMF series panels have been certified to installed on Colorbond roof sheeting and Zincalume. Any other roof sheeting install requires consultation with Sunman or its local importer. Installation of SMD and SMF series panels require Sika Sikasil SG-20 or Tonsan 1527. Mounting module with clamps is not suitable. Please refer to installation manual for mounting method.

SMF425F-6X24UW AU 2021A

## ELECTRICAL CHARACTERISTICS

STC	SMF425F-6X24UW	SMF430F-6X24UW
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 (%)	19.2	19.4
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/m <sup>2</sup> , Cell temperature 25 °C , AM=1.5.		
Tolerances of $P_{max}$ , $V_{oc}$ and $I_{sc}$ are within ±5%		

NMOT	SMF425F-6X24UW	SMF430F-6X24UW
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 (6×24)
Module Dimensions	2120×1046×2 mm
Weight	7.2kg
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-6X24UW

# 440 Watt

## 144 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 7.2 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**

**10 Year Product Warranty**

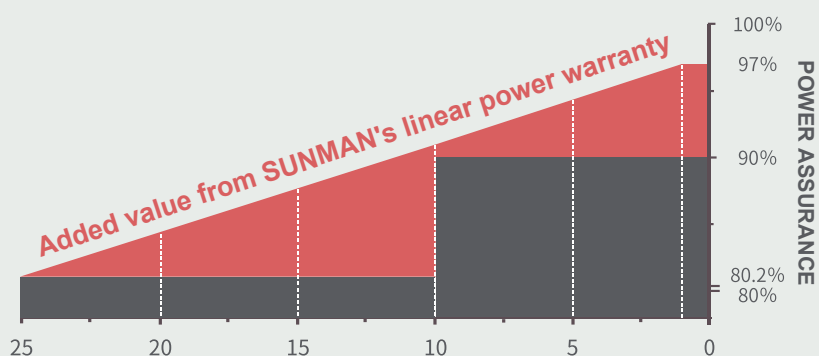
**25 Year Linear Power Warranty**



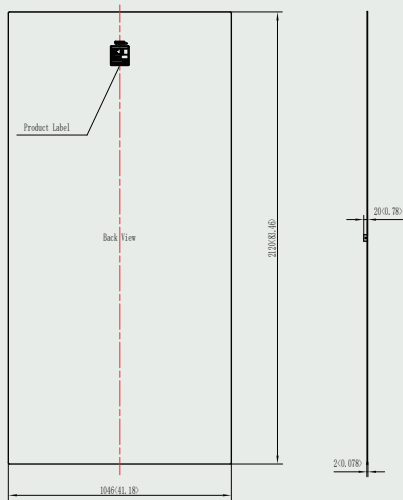
[www.sunman-energy.com](http://www.sunman-energy.com)

CAUTION: Read installation manual before using the product.

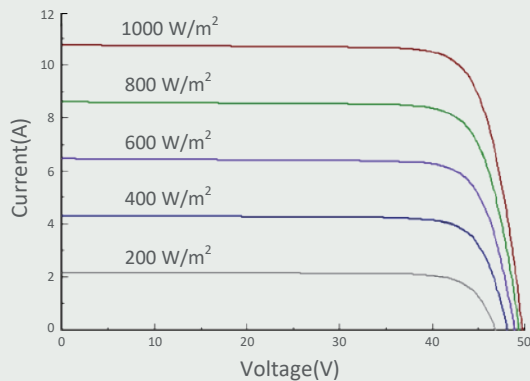
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## DIMENSIONS



## 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



SMD and SMF series panels have been certified to installed on Colorbond roof sheeting and Zincalume.  
Any other roof sheeting install requires consultation with Sunman or its local importer.  
Installation of SMD and SMF series panels require Sika Sikasil SG-20 or Tonsan 1527.  
Mounting module with clamps is not suitable. Please refer to installation manual for mounting method.

SMF440F IEC AU 2021A

## ELECTRICAL CHARACTERISTICS

STC	SMF435F-6X24UW	SMF440F-6X24UW
Maximum Power (P <sub>max</sub> )	435	440
Maximum Power Voltage (V <sub>mp</sub> )	42.2	42.4
Maximum Power Current (I <sub>mp</sub> )	10.31	10.38
Open-circuit Voltage (V <sub>oc</sub> )	50.0	50.2
Short-circuit Current (I <sub>sc</sub> )	10.81	10.88
Module Efficiency (%)	19.6	19.8
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 <sub>max</sub> , V <sub>oc</sub> and I <sub>sc</sub> are within ±5%		

NMOT	SMF435F-6X24UW	SMF440F-6X24UW
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 (6×24)
Module Dimensions	2120×1046×2 mm
Weight	7.2kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)150 / (-)450 mm

Connector	Dawning: C1 
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## PACKAGING CONFIGURATION

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