

# eArc **SMD215F-4X18UW**

## **215 Watt**

## 72 Half Cell Monocystalline Module





Ultra-light: Glass free module weighs 4.7 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** 







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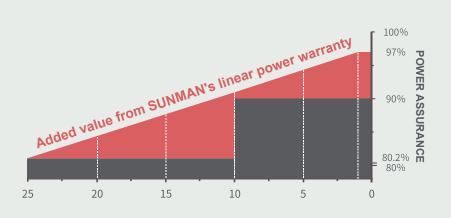


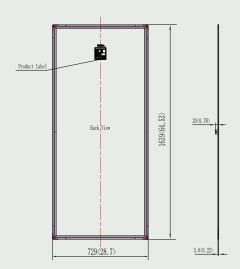




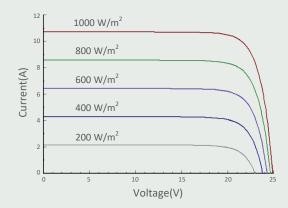








### I-V CURVE (215)



### TEMPERATURE CHARACTERISTICS

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



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.

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### **ELECTRICAL CHARACTERISTICS**

STC		SMD210F-4X18UW	SMD215F-4X18UW	
Maximum Power (	P <sub>max</sub> )	210	215	
Maximum Power V	oltage (V <sub>mp</sub> )	20.8	21.0	
Maximum Power C	Surrent (I <sub>mp</sub> )	10.10	10.24	
Open-circuit Volta	ge (V <sub>oc</sub> )	24.7	24.9	
Short-circuit Curre	ent (I <sub>sc</sub> )	10.58	10.72	
Module Efficiency	(%)	17.6	18.0	
Operating Tempera	ature	-40 °C t	-40 °C to 85 °C	
Maximum System	Voltage	1000 V I	DC (IEC)	
Maximum Series F	use Rating	20	A	
Application Class		Clas	ss A	
Power Tolerance		0/+:	5 W	
STC: Irradiance 1000W/m <sup>2</sup> , Ce	ll temperature 25 ℃, AM=1.		P , V_ and I_ are within ±5%	

NMOT	SMD210F-4X18UW	SMD215F-4X18UW
Maximum Power (P <sub>max</sub> )	158.8	162.6
Maximum Power Voltage (V <sub>mp</sub> )	19.2	19.4
Maximum Power Current (I <sub>mp</sub> )	8.28	8.39
Open-circuit Voltage (V <sub>oc</sub> )	23.2	23.4
Short-circuit Current (I <sub>sc</sub> )	8.57	8.68
NMOT: Irradiance 800W/m 2 , Ambient temperature 20 0	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	1639×729×5.6 mm	
Weight	4.7kg	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm	
Connector	Dawning: C1	

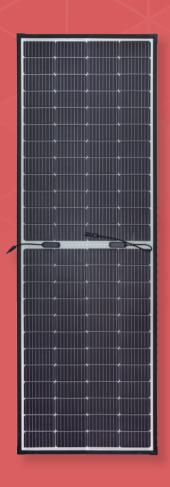
	20' GP	40' HC
Module per pallet	50	50+30
Pieces per container	600	1690



# eArc **SMD285F-4X24UW**

# **285 Watt**

## 96 Half Cell Monocystalline 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 280~285 W

**POWER TOLERANCE** 

0-5 W

MADE IN CHINA

### LINEAR PERFORMANCE WARRANTY

**10 Year Product Warranty** 

**25 Year Linear Power Warranty** 













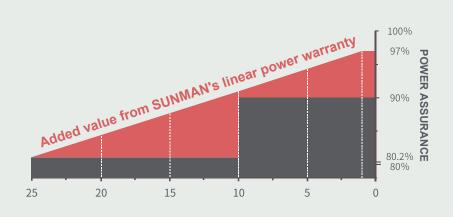


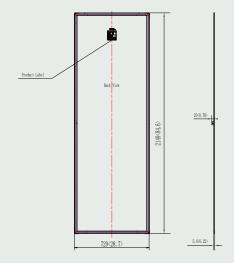




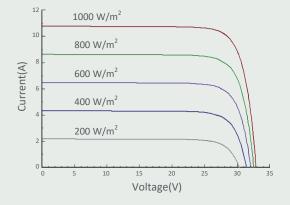


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### I-V CURVE (285)



### TEMPERATURE CHARACTERISTICS

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



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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.

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### **ELECTRICAL CHARACTERISTICS**

STC	SMD280F-4X24UW	SMD285F-4X24UW	
Maximum Power (P <sub>max</sub> )	280	285	
Maximum Power Voltage (V <sub>mp</sub> )	27.5	27.7	
Maximum Power Current (I <sub>mp</sub> )	10.19	10.29	
Open-circuit Voltage (V <sub>oc</sub> )	32.7	32.9	
Short-circuit Current (I <sub>sc</sub> )	10.68	10.78	
Module Efficiency (%)	17.9	18.2	
Operating Temperature	-40 °C t	o 85 °C	
Maximum System Voltage	1000 V I	DC (IEC)	
Maximum Series Fuse Rating	20	A	
Application Class	Clas	ss A	
Power Tolerance	0/+	5 W	
STC: Irradiance 1000W/m², Cell temperature 25 °C, AM=	1.5. Tolerances of	P, V_ and I_ are within ±5%	

NMOT	SMD280F-4X24UW	SMD285F-4X24UW
Maximum Power (P <sub>max</sub> )	211.7	215.5
Maximum Power Voltage (V <sub>mp</sub> )	25.4	25.6
Maximum Power Current (I <sub>mp</sub> )	8.34	8.42
Open-circuit Voltage (V <sub>oc</sub> )	30.7	30.9
Short-circuit Current (I <sub>sc</sub> )	8.64	8.72
NMOT: Irradiance 800W/m 2 . 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	2149×729×5.6 mm	
Weight	5.9kg	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm	
Connector	Dawning: C1 DAWNING	

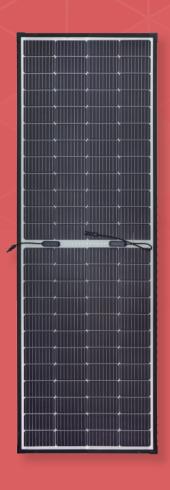
	20' GP	40' HC
Module per pallet	50	50+30
Pieces per container	500	1300



# eArc SMD290F-4X24UW

## **290 Watt**

## 96 Half Cell Monocystalline 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 285~290 W

**POWER TOLERANCE** 

0-5 W

MADE IN CHINA

### LINEAR PERFORMANCE WARRANTY

**10 Year Product Warranty** 

**25 Year Linear Power Warranty** 















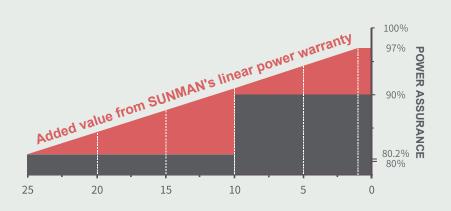


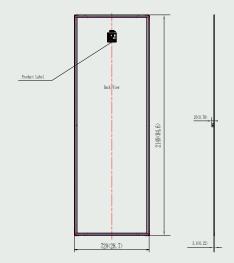




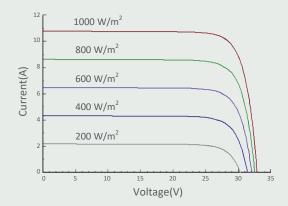


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### I-V CURVE (285)



### TEMPERATURE CHARACTERISTICS

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



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Mounting module with clamps is not suitable. Please refer to installation manual for mounting method.

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### **ELECTRICAL CHARACTERISTICS**

STC	SMD285F-4X24UW	SMD290F-4X24UW
Maximum Power (P <sub>max</sub> )	285	290
Maximum Power Voltage (V <sub>mp</sub> )	27.7	27.9
Maximum Power Current (I <sub>mp</sub> )	10.29	10.40
Open-circuit Voltage (V <sub>oc</sub> )	32.9	33.1
Short-circuit Current (I <sub>sc</sub> )	10.78	10.90
Module Efficiency (%)	18.2	18.5
Operating Temperature	-40 °C t	o 85 °C
Maximum System Voltage	1000 V E	OC (IEC)
Maximum Series Fuse Rating	20	A
Application Class	Clas	ss A
Power Tolerance	0/+5	5 W
STC: Irradiance 1000W/m², Cell temperature 25 C, AM=	1.5. Tolerances of	P , V and I are within ±5%

NMOT	SMD285F-4X24UW	SMD290F-4X24UW
Maximum Power (P <sub>max</sub> )	215.5	219.3
Maximum Power Voltage (V <sub>mp</sub> )	25.6	25.8
Maximum Power Current (I <sub>mp</sub> )	8.42	8.51
Open-circuit Voltage (V <sub>oc</sub> )	30.9	31.1
Short-circuit Current (I <sub>sc</sub> )	8.72	8.82
NMOT: Irradiance 800W/m 2 . Ambient temperature 200	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	2149×729×5.6 mm	
Weight	5.9kg	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm	
Connector	Dawning: C1 DAVINING	

	20' GP	40' HC
Module per pallet	50	50+30
Pieces per container	500	1300



# eArc **SMD360F-6X20UW**

## **360 Watt**

# 120 Half Cell Monocystalline Module





Ultra-light: Glass free module weighs 7.1 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** 







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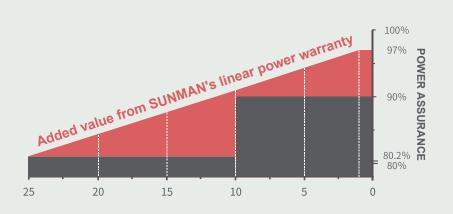


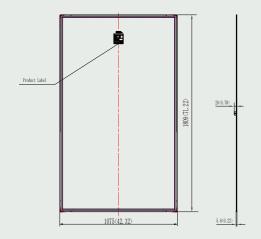




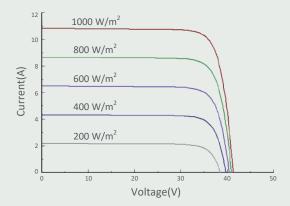








### I-V CURVE (360)



### TEMPERATURE CHARACTERISTICS

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



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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.

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### **ELECTRICAL CHARACTERISTICS**

STC	SMD355F-6X20UW	SMD360F-6X20UW
Maximum Power (P <sub>max</sub> )	355	360
Maximum Power Voltage (V <sub>mp</sub> )	34.7	34.9
Maximum Power Current (I <sub>mp</sub> )	10.24	10.32
Open-circuit Voltage (V <sub>oc</sub> )	41.1	41.3
Short-circuit Current (I <sub>sc</sub> )	10.72	10.82
Module Efficiency (%)	18.3	18.5
Operating Temperature	-40 °C t	o 85 °C
Maximum System Voltage	1000 V I	DC (IEC)
Maximum Series Fuse Rating	20	A
Application Class	Clas	ss A
Power Tolerance	0/+:	5 W
STC: Irradiance 1000W/m², Cell temperature 25 °C, AM=1.		P , V and I are within ±5%

NMOT	SMD355F-6X20UW	SMD360F-6X20UW
Maximum Power (P <sub>max</sub> )	268.4	272.2
Maximum Power Voltage (V <sub>mp</sub> )	32.0	32.2
Maximum Power Current (I <sub>mp</sub> )	8.39	8.46
Open-circuit Voltage (V <sub>oc</sub> )	38.6	38.8
Short-circuit Current (I <sub>sc</sub> )	8.69	8.77
NMOT: Irradiance 800W/m 2 , 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	1809×1075×5.6 mm	
Weight	7.1kg	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm	
Connector	Dawning: C1	

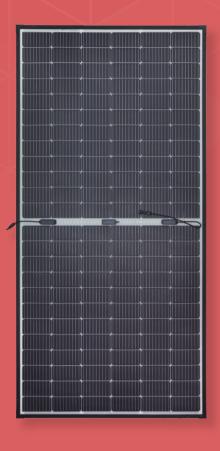
	20' GP	40' HC
Module per pallet	50+40	50
Pieces per container	540	1200



# eArc **SMD430F-6X24UW**

## **430 Watt**

# 144 Half Cell Monocystalline Module





Ultra-light: Glass free module weighs 8.3 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

**10 Year Product Warranty** 

**25 Year Linear Power Warranty** 







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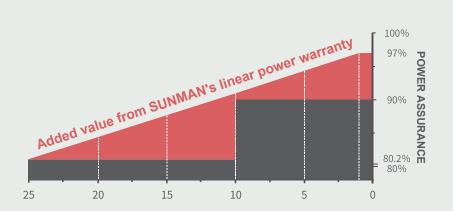


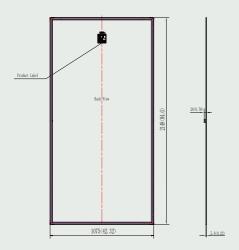




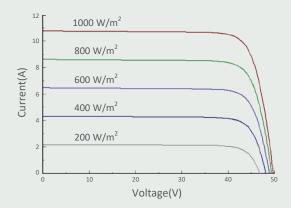








### I-V CURVE (430)



### TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NOMT)	<b>41±2</b> °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 %/℃



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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.

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### **ELECTRICAL CHARACTERISTICS**

STC	SMD425F-6X24UW	SMD430F-6X24UW	
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 (%)	18.4	18.6	
Operating Temperature	-40 °C t	o 85 °C	
Maximum System Voltage	1000 V E	OC (IEC)	
Maximum Series Fuse Rating	20	A	
Application Class	Clas	ss A	
Power Tolerance	0/+5	5 W	
		P <sub>max</sub> , V <sub>oc</sub> and I <sub>sc</sub> are within ±5%	

NMOT	SMD425F-6X24UW	SMD430F-6X24UW
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 2 , Ambient temperature 200	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	2149×1075×5.6 mm	
Weight	8.3kg	
Backsheet	White	
Frame	Black Anodized Aluminium Alloy	
J-box	IP 68 rated	
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm	
Connector	Dawning: C1	

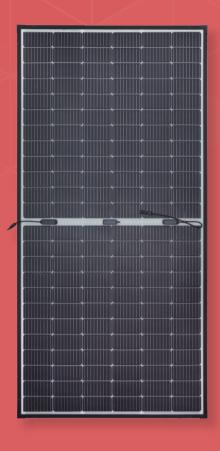
	20' GP	40' HC
Module per pallet	50+40	50
Pieces per container	450	1000



# eArc SMD440F-6X24UW

## **440 Watt**

# 144 Half Cell Monocystalline Module





Ultra-light: Glass free module weighs 8.3 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

**10 Year Product Warranty** 

**25 Year Linear Power Warranty** 





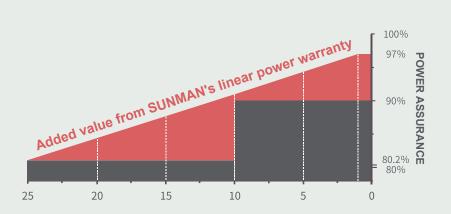


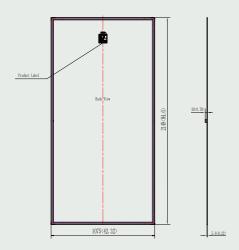
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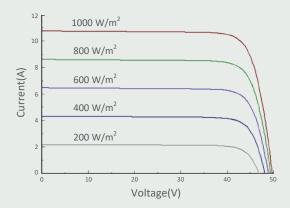


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### I-V CURVE (430)



### **TEMPERATURE CHARACTERISTICS**

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



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### **ELECTRICAL CHARACTERISTICS**

S	тс	SMD435F-6X24UW	SMD440F-6X24UW	
M	laximum Power (P <sub>max</sub> )	435	440	
M	laximum Power Voltage (V <sub>mp</sub> )	42.2	42.4	
M	laximum Power Current (I <sub>mp</sub> )	10.31	10.38	
0	pen-circuit Voltage (V <sub>oc</sub> )	50.0	50.2	
s	hort-circuit Current (I <sub>sc</sub> )	10.81	10.88	
M	lodule Efficiency (%)	18.8	19.0	
0	perating Temperature	-40 °C t	-40 °C to 85 °C	
M	laximum System Voltage	1000 V DC (IEC)		
M	laximum Series Fuse Rating	20 A		
Α	pplication Class	Class A		
Р	ower Tolerance	0/+5	0/+5 W	

NMOT	SMD435F-6X24UW	SMD440F-6X24UW
Maximum Power (P <sub>max</sub> )	328.9	332.7
Maximum Power Voltage (V <sub>mp</sub> )	39.0	39.1
Maximum Power Current (I <sub>mp</sub> )	8.44	8.51
Open-circuit Voltage (V <sub>oc</sub> )	47.0	47.1
Short-circuit Current (I <sub>sc</sub> )	8.75	8.82

### **MECHANICAL CHARACTERISTICS**

Solar Cell Monocrystalline silicon(166mm half cell) No. of Cells 144 (6×24) **Module Dimensions** 2149×1075×5.6 mm Weight 8.3kg **Backsheet** White Frame **Black Anodized Aluminium Alloy** J-box IP 68 rated **Output Cables** Photovoltaic technology cable 4.0 mm 2 , (+)150 / (-)450 mm Connector Dawning: C1 **DAWNING** 

	20' GP	40' HC
Module per pallet	50+40	50
Pieces per container	450	1000