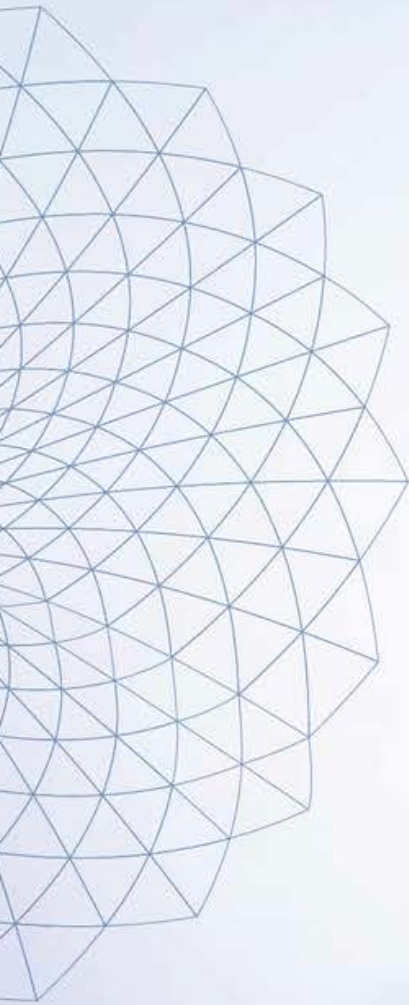





HIGH POWER PERC SOLAR MODULE


182 cell | 10BB | Half cut


Optional: **JNMM108-395~415** | **JNMM144-535~555**




HIGH POWER & HIGH COMPATIBILITY

 High-power and larger modules reduce BOS cost and LCOE of power stations

 Optional different layouts and types of modules for various scenarios

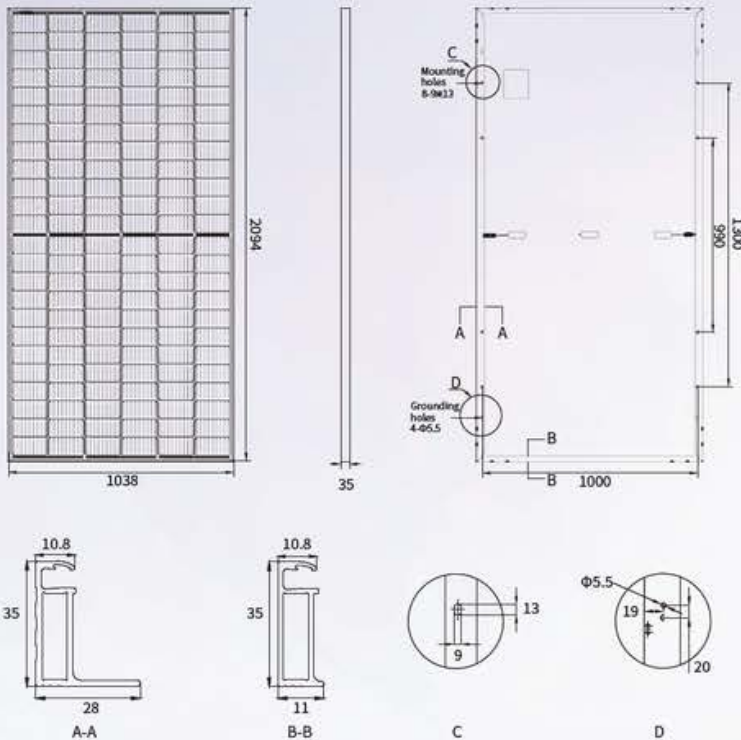
 **12** year product warranty

 **25** year power generation warranty

High efficiency PERC solar module

JNMM144-435~455(L)

ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	166*83 PERC
Dimensions (L*W*H) (mm)	2094*1038*35
Weight (kg)	22.9
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	3.2

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	20
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Hot Spot Rate	100% Free
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.29 %/°C
Temperature Coefficient Current (Isc)	0.04 %/°C
Temperature Coefficient Power (Pm)	-0.35 %/°C

ELECTRICAL PARAMETERS

Module Type	(1000V DC)	JNMM144-435L	JNMM144-440L	JNMM144-445L	JNMM144-450L	JNMM144-455L
	(1500V DC)	JNMM144-435	JNMM144-440	JNMM144-445	JNMM144-450	JNMM144-455
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	435	440	445	450	455
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	40.77	40.97	41.16	41.36	41.56
	Max. Power Current (Imp/A)	10.67	10.74	10.82	10.89	10.96
	Open Circuit Voltage (Voc/V)	49.39	49.58	49.78	49.98	50.18
	Short Circuit Current (Isc/A)	11.28	11.35	11.42	11.50	11.58
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Module Efficiency (%)	20.01	20.24	20.47	20.70	20.93
	Max. Power (Pmpp/W)	327.4	331.2	334.9	338.7	342.5
	Max. Power Voltage (Vmp/V)	38.36	38.54	38.69	38.88	39.06
	Max. Power Current (Imp/A)	8.54	8.59	8.66	8.71	8.77
	Open Circuit Voltage (Voc/V)	46.63	46.81	47.00	47.18	47.37
	Short Circuit Current (Isc/A)	9.08	9.14	9.19	9.26	9.32

*Measurement tolerance: Pmax:±3%, Voc:±3%, Isc:±5%

I-V CURVE (445W)



PACKING CONFIGURATION

Pieces Per Pallet	31
Pallets Per Container	22
Pieces Per Container	682

Default

Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 400mm/200mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Max. System Voltage	<input type="checkbox"/> 1500V	<input type="checkbox"/> 1000V



TUV: IEC/EN 61215, IEC/EN 61730
 GB/T 19001-2016/ISO 9001:2015
 GB/T 24001-2016/ISO 14001:2015
 GB/T 45001-2020/ISO 45001:2018
 CNAS-CL01: ISO/IEC 17025:2017

12-year Product materials and workmanship quality warranty

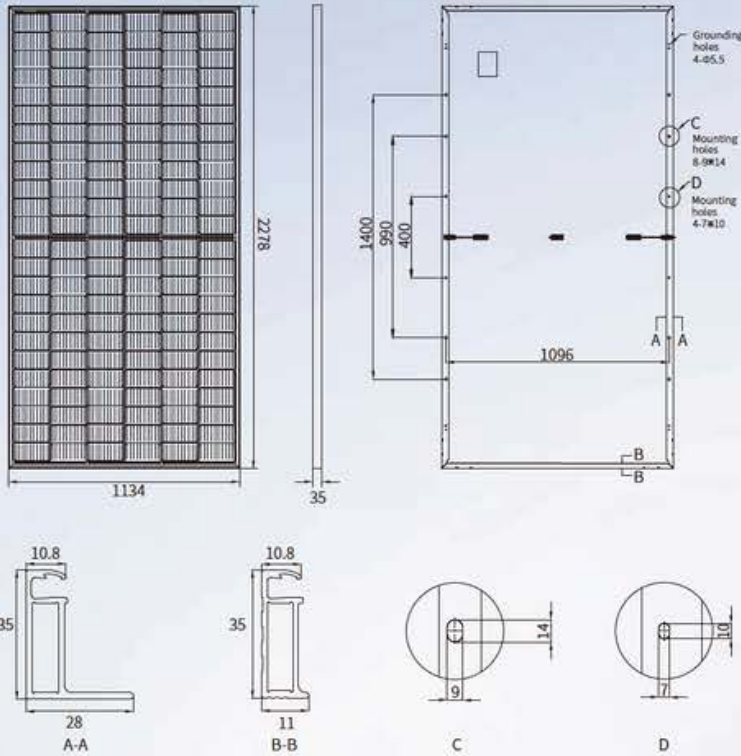
Output power

The 1st year	The 12th year	The 25th year
>98.00%	>91.95%	>84.80%

CAUTION: The electrical parameters in this product datasheet do not refer to only one module. Read safety and installation instructions before using the product. The contents of this specification are for reference only and are subject to change without notice. Jinery reserves the right of final interpretation.
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ENGINEERING DRAWING



MECHANICAL PARAMETERS

Cell (mm)	182*91 PERC
Dimensions (L*W*H) (mm)	2278*1134*35
Weight (kg)	27.2
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3
Frame	Anodized Aluminium Alloy
Glass Thickness (mm)	3.2

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	25
Max.Wind Load/Max.Snow Load (Pa)	2400/5400
Hot Spot Rate	100% Free
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

TEMPERATURE COEFFICIENTS

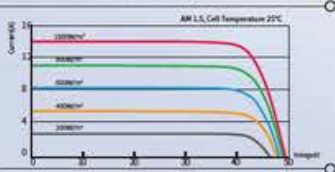
Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.29 %/°C
Temperature Coefficient Current (Isc)	0.04 %/°C
Temperature Coefficient Power (Pm)	-0.34 %/°C

ELECTRICAL PARAMETERS

Module Type (1500V DC)	JNMM144-535	JNMM144-540	JNMM144-545	JNMM144-550	JNMM144-555	
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	535	540	545	550	555
	Output Tolerance (W)	0~+5	0~+5	0~+5	0~+5	0~+5
	Max. Power Voltage (Vmp/V)	41.28	41.54	41.76	41.98	42.20
	Max. Power Current (Imp/A)	12.97	13.00	13.06	13.12	13.17
	Open Circuit Voltage (Voc/V)	49.12	49.43	49.70	49.97	50.24
	Short Circuit Current (Isc/A)	13.79	13.83	13.88	13.93	13.98
	Module Efficiency (%)	20.71	20.90	21.10	21.29	21.48
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power (Pmpp/W)	404.7	408.5	412.3	416.1	419.8
	Max. Power Voltage (Vmp/V)	39.01	39.28	39.46	39.64	39.85
	Max. Power Current (Imp/A)	10.38	10.40	10.45	10.50	10.54
	Open Circuit Voltage (Voc/V)	46.37	46.67	46.92	47.17	47.43
	Short Circuit Current (Isc/A)	11.10	11.13	11.18	11.22	11.26

*Measurement tolerance: Pmax: ±3%, Voc: ±3%, Isc: ±5%

I-V CURVE (545W)



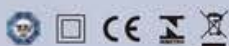
PACKING CONFIGURATION

Pieces Per Pallet	31
Pallets Per Container	20
Pieces Per Container	620

Default

Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 400mm/300mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black



TUV: IEC/EN 61215, IEC/EN 61730
GB/T 19001-2016/ISO 9001:2015
GB/T 24001-2016/ISO 14001:2015
GB/T 45001-2020/ISO 45001:2018
CNAS-CL01: ISO/IEC 17025:2017

12-year Product materials and workmanship quality warranty

Output power

The 1st year	The 12th year	The 25th year
>98.00%	>91.95%	>84.80%

CAUTION: The electrical parameters in this product datasheet do not refer to only one module. Read safety and installation instructions before using the product. The contents of this specification are for reference only and are subject to change without notice. Jinery reserves the right of final interpretation.
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JNMM144-435~455(L)

"L" after the module type indicates that the type is suitable for 1000V DC.

High efficiency mono solar module

JNMM144

Ga-doped silicon wafer, effectively reduce LID and LeTID. SE technology effectively improves cell conversion efficiency.

Optimized anti-reflective film and high-impedance encapsulating material to obtain excellent anti-PID performance.

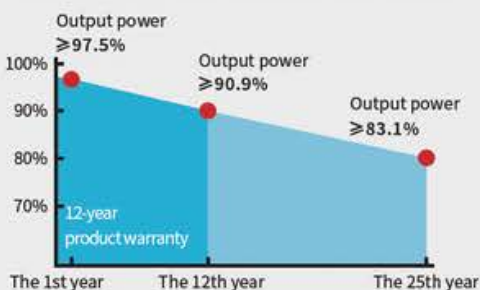
MBB and half-cell design to reduce shadow effects, improve module reliability and reduces loss.

CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
 BIS: IS 14286/IEC 61215, IS/IEC 61730
 GB/T 19001-2016/ ISO 9001:2015
 GB/T 24001-2016/ ISO 14001:2015
 OHSAS 18001:2007
 CNAS-CL01:ISO/IEC 17025:2017

QUALITY ASSURANCE



Advanced production process

Optimized MBB design
 Cell efficiency >22.8%



Superior quality control

Full automatic production line
 MES and ERP digitizing logistics management
 100% three times EL and appearance inspection



Excellent power generation performance

0~+5W positive power tolerance
 Improved low light irradiance performance and low degradation



Stable mechanical performance

Passed rigorous hail test
 Withstands 5400Pa snow and 2400Pa wind loads



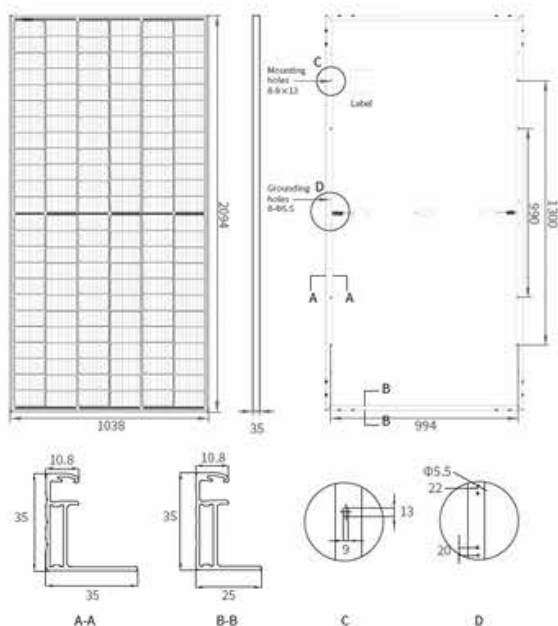
Long weather resistance

Excellent anti-PID performance
 Certified in fireproofing for safety



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 Tel: +86(354)2037999 E-mail: sales@jinery.com



MECHANICAL PARAMETERS

Cell (mm)	166*83 Mono
Dimensions (L*W*H) (mm)	2094*1038*35
Weight (kg)	23.3
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3

QUALIFICATION

Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	20
Max. Wind Load / Max. Snow Load (Pa)	2400 / 5400
Hot Spot Rate	100% Free
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

ELECTRICAL PARAMETERS

Module Type	(1000V DC)	JNMM144-435L	JNMM144-440L	JNMM144-445L	JNMM144-450L	JNMM144-455L
	(1500V DC)	JNMM144-435	JNMM144-440	JNMM144-445	JNMM144-450	JNMM144-455
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	435	440	445	450	455
	Output Tolerance (W)	0-+5	0-+5	0-+5	0-+5	0-+5
	Max. Power Voltage (Vmp/V)	40.77	40.97	41.16	41.36	41.56
	Max. Power Current (Imp/A)	10.67	10.74	10.82	10.89	10.96
	Open Circuit Voltage (Voc/V)	49.39	49.58	49.78	49.98	50.18
	Short Circuit Current (Isc/A)	11.28	11.35	11.42	11.50	11.58
	Module Efficiency (%)	20.0	20.2	20.5	20.7	20.9
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power at NMOT (Pmpp/W)	327.4	331.2	334.9	338.7	342.5
	Max. Power Voltage (Vmp/V)	38.36	38.54	38.69	38.88	39.06
	Max. Power Current (Imp/A)	8.54	8.59	8.66	8.71	8.77
	Open Circuit Voltage (Voc/V)	46.63	46.81	47.00	47.18	47.37
	Short Circuit Current (Isc/A)	9.08	9.14	9.19	9.26	9.32

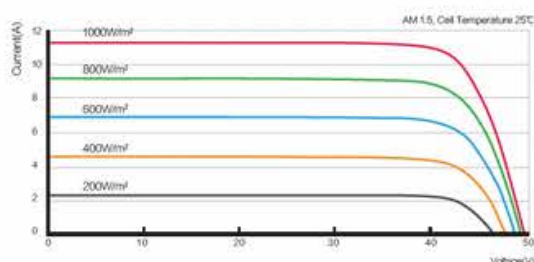
PACKING CONFIGURATION

Pieces Per Pallet	31
Pallets Per Stack	2
Stacks Per Container	11
Pieces Per Container	682

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.29 %/°C
Temperature Coefficient Current (Isc)	0.04 %/°C
Temperature Coefficient Power (Pm)	-0.37 %/°C

I-V CURVE(445W)



Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 295mm / 145mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Max. System Voltage	<input type="checkbox"/> 1000V	<input type="checkbox"/> 1500V

Notes:



JNMM144-530~550(L)

"L" after the module type indicates that the type is suitable for 1000V DC.

High efficiency mono solar module

JNMM144

Deploying 182 wafer and advanced PERC technology, the module features high efficiency.

MBB and high-density interconnect technology improves power output and module efficiency.

Deploying advanced non-destructive cutting and half-cut technology, the module features excellent mechanical performance.

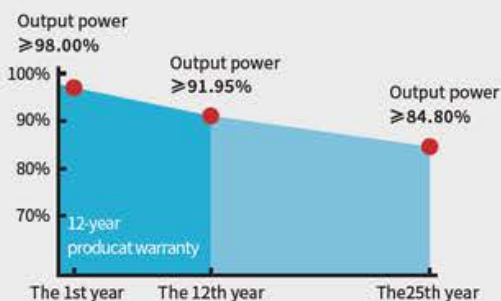
Higher power output brings competitive LCOE and BOS cost, more suitable for ground-mount and C&I PV stations.

CERTIFICATION



TUV: IEC/EN 61215, IEC/EN 61730
BIS: IS 14286/IEC 61215, IS/IEC 61730
GB/T 19001-2016/ ISO 9001:2015
GB/T 24001-2016/ ISO 14001:2015
GB/T 45001-2020/ ISO 45001:2018
CNAS-CL01:ISO/IEC 17025:2017

QUALITY ASSURANCE



Advanced production process

Optimized MBB design
Cell efficiency >23.0%



Superior quality control

Full automatic production line
MES and ERP digitizing logistics management
100% three times EL and appearance inspection



Excellent power generation performance

0~+5W positive power tolerance
Improved low light irradiance performance and low degradation



Stable mechanical performance

Passed rigorous hail test
Withstands 5400Pa snow and 2400Pa wind loads



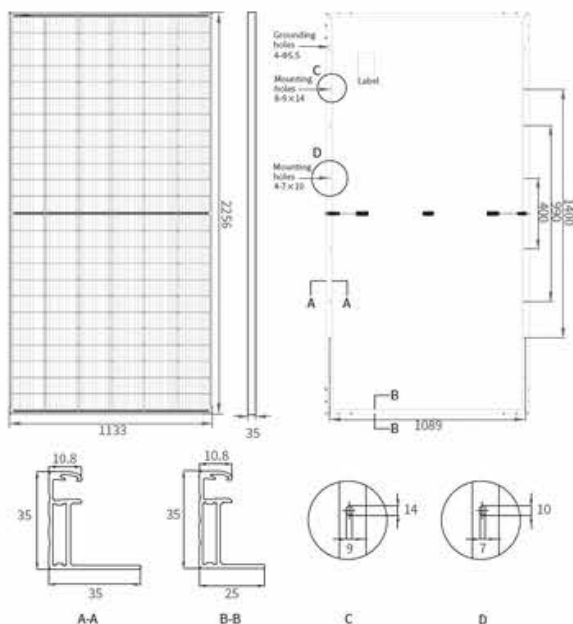
Long weather resistance

Excellent anti-PID performance
Certified in fireproofing for safety



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MECHANICAL PARAMETERS

Cell (mm)	182*91 Mono
Dimensions (L*W*H) (mm)	2256*1133*35
Weight (kg)	27.4
Cable Cross Section Size (mm ²)	4
No. of Cells & Connections	144(6*24)
No. of Diodes	3

QUALIFICATION	
Temperature Cycling Range (°C)	-40~+85
Max. Series Fuse Rating (A)	25
Max. Wind Load / Max. Snow Load (Pa)	2400 / 5400
Hot Spot Rate	100% Free
Fire Rating	Class C
Junction Box & Connector Protection Grade	IP68

ELECTRICAL PARAMETERS

Module Type	(1000V DC)	JNMM144-530L	JNMM144-535L	JNMM144-540L	JNMM144-545L	JNMM144-550L
	(1500V DC)	JNMM144-530	JNMM144-535	JNMM144-540	JNMM144-545	JNMM144-550
STC AM1.5 1000W/m ² Cell Temperature 25°C	Max. Power at STC (Pmpp/W)	530	535	540	545	550
	Output Tolerance (W)	0+5	0+5	0+5	0+5	0+5
	Max. Power Voltage (Vmp/V)	41.03	41.28	41.54	41.76	41.98
	Max. Power Current (Imp/A)	12.92	12.97	13.00	13.06	13.12
	Open Circuit Voltage (Voc/V)	48.83	49.12	49.43	49.70	49.97
	Short Circuit Current (Isc/A)	13.74	13.79	13.83	13.88	13.93
	Module Efficiency (%)	20.74	20.93	21.13	21.32	21.52
NMOT AM1.5 800W/m ² Ambient Temperature 20°C Wind Speed 1m/s	Max. Power at NMOT (Pmpp/W)	400.3	404.0	407.8	411.6	415.4
	Max. Power Voltage (Vmp/V)	38.72	38.94	39.21	39.39	39.57
	Max. Power Current (Imp/A)	10.34	10.38	10.40	10.45	10.50
	Open Circuit Voltage (Voc/V)	46.10	46.37	46.67	46.92	47.17
	Short Circuit Current (Isc/A)	11.06	11.10	11.13	11.18	11.22

*Measurement tolerance: Pmax: ±3%, Voc: ±3%; Isc: ±5%.

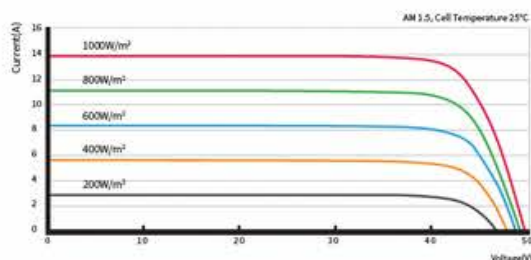
PACKING CONFIGURATION

Pieces Per Pallet	31
Pallets Per Stack	2
Stacks Per Container	10
Pieces Per Container	620

TEMPERATURE COEFFICIENTS

Nominal Module Operating Temperature (NMOT)	43±2°C
Temperature Coefficient Voltage (Voc)	-0.29 %/°C
Temperature Coefficient Current (Isc)	0.04 %/°C
Temperature Coefficient Power (Pm)	-0.35 %/°C

I-V CURVE(540W)



Optional

Connector Type	<input type="checkbox"/> MC4 Compatible	<input type="checkbox"/> MC4
Cable Length	<input type="checkbox"/> 400mm / 300mm	<input type="checkbox"/> Customized
Frame Color	<input type="checkbox"/> Silver	<input type="checkbox"/> Black
Max. System Voltage	<input type="checkbox"/> 1000V	<input type="checkbox"/> 1500V

Notes: