

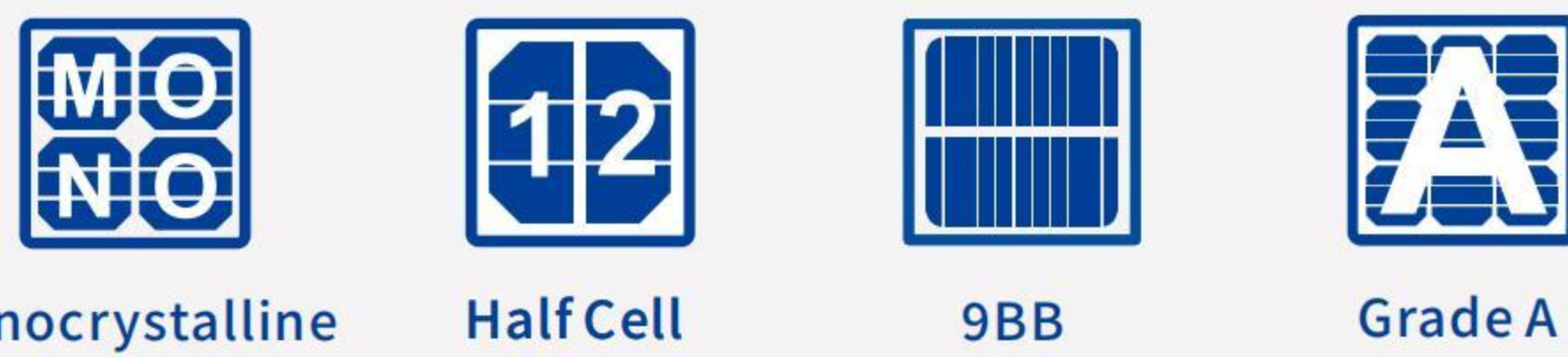
MonoR Series

Monocrystalline
144 - cell Module

TW-455HH-A

435-455W

0-3% Positive Tolerance



• MODULE FEATURES

- High Efficiency**
PERC technology improves efficiency, increases power generation, and contributes to lower LCOE.
- Lower Heat Spot Risk**
Innovative circuit design and "Half Cell" structure decrease the temperature of heat spots and effectively reduce power loss.
- Excellent Low-light Performance**
Reliable performance in low-light conditions such as in the morning, at dusk or during raining days.
- Resilient to Extreme Weather**
Carefully selected materials ensure the module still works well under the condition of 2400Pa wind load and 5400Pa snow load.
- ANTI PID**
High quality solar cell and advanced processing technology contribute to excellent PID resistance performance.

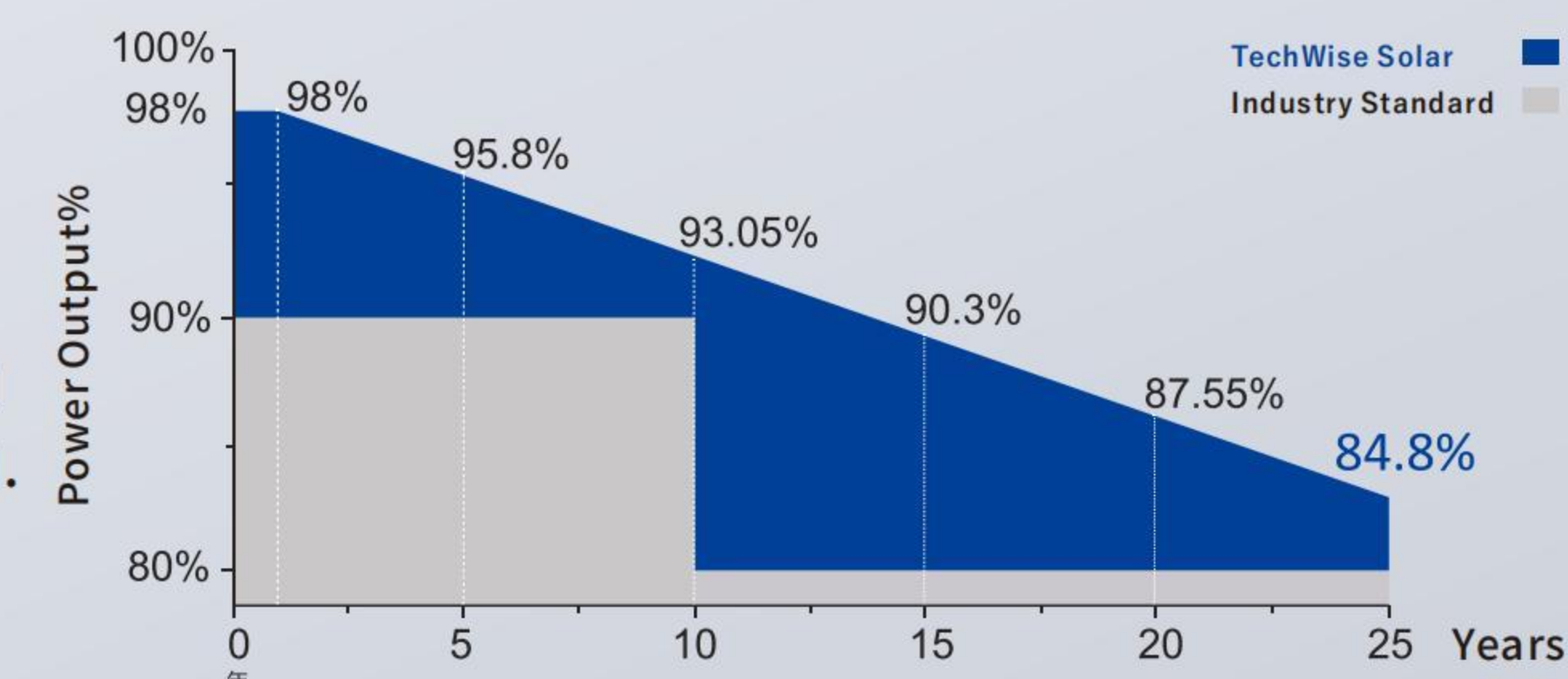
• Quality Certification



• Product Qualification



• Performance Warranty



12 12 Years Product Warranty

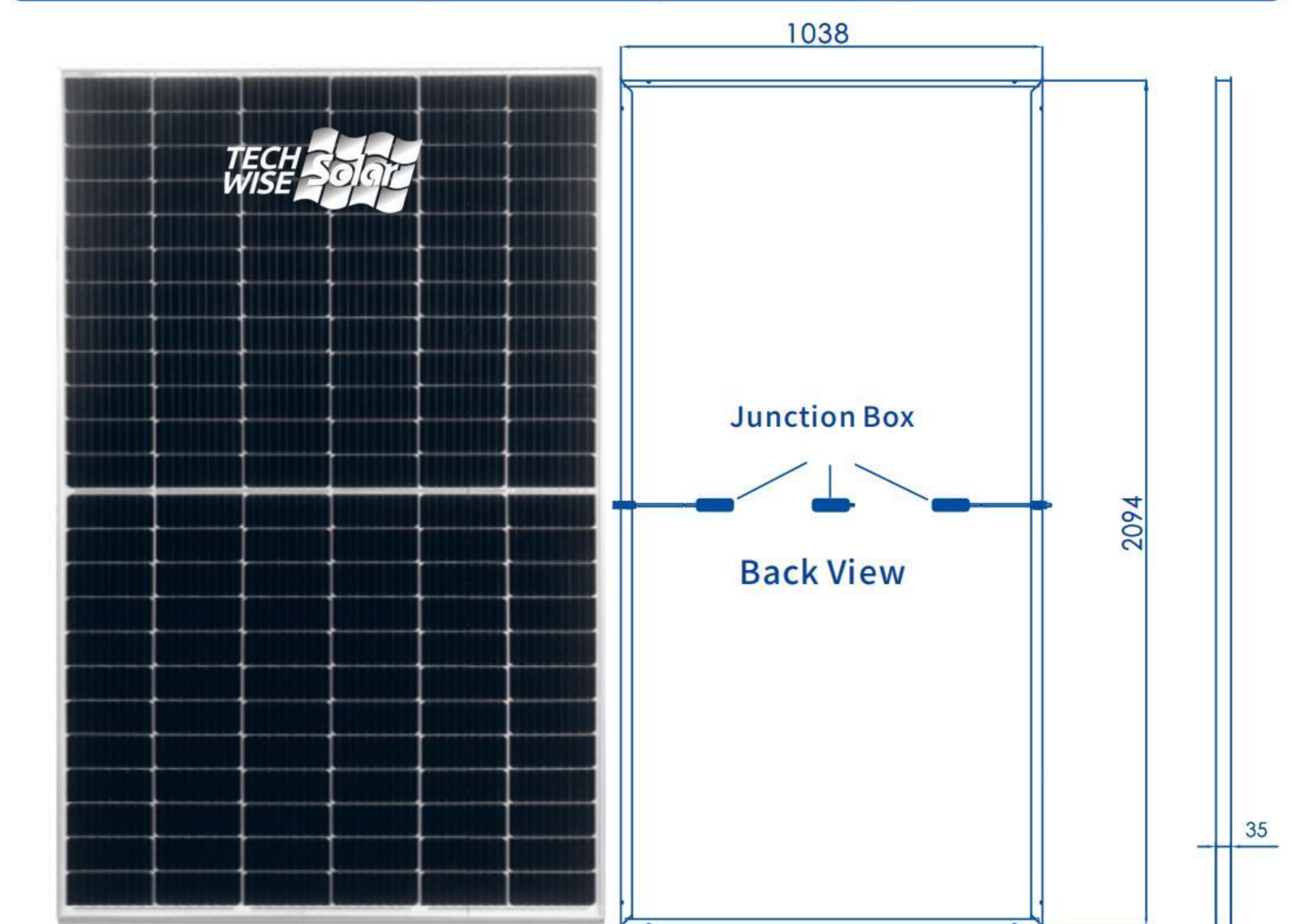
25 25 Years Linear Power Warranty

TW-455HH-A

• Product Specification •

Cell Type	Mono crystalline
Cell Quantity	144 cell
Cell Size(mm)	166*83
Module Size (mm)	2094*1038*35
Module Weight (kg)	23.5
Glass Thickness(mm)	3.2
Frame Material	Anodized aluminum alloy
Junction Box	IP68
Cable/Connector	4mm ² , MC4compatible
Cable Length	+300mm/-300mm; or Customize
Max System Volt(V)	1500V DC
Max Fuse Rate(A)	20
Power Tolerance	0-+3%

• Engineering Drawings •



• Electrical Characteristics •

STC standard performance >>>

Power Level	435	440	445	450	455
Pmax(W)	435	440	445	450	455
Vmp(V)	40.97	41.16	41.36	41.56	41.75
Imp(A)	10.62	10.69	10.76	10.83	10.90
Voc(V)	49.27	49.47	49.67	49.87	50.06
Isc(A)	11.09	11.16	11.23	11.30	11.37
Module Efficiency(%)	20.01	20.24	20.47	20.70	20.93

NOCT standard performance >>>

Power Level	435	440	445	450	455
Pmax(W)	323	327	330	334	337
Vmp(V)	38.00	38.21	38.38	38.57	38.70
Imp(A)	8.50	8.56	8.60	8.66	8.71
Voc(V)	46.35	46.49	46.70	46.89	47.02
Isc(A)	8.99	9.05	9.10	9.16	9.22

STC: Irradiance 1000W/m², Module Temperature 25°C, AM1.5
NOCT: Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

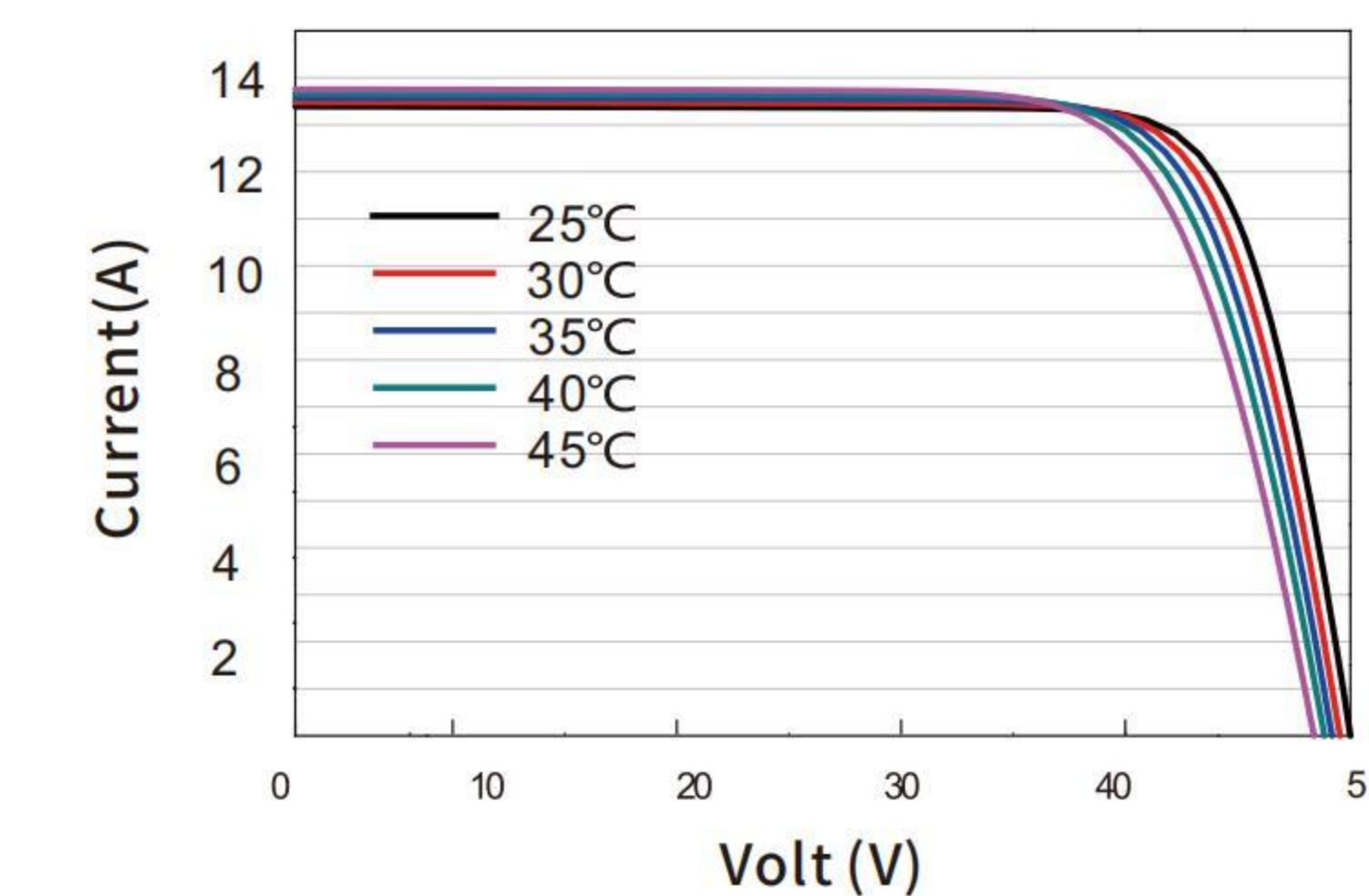
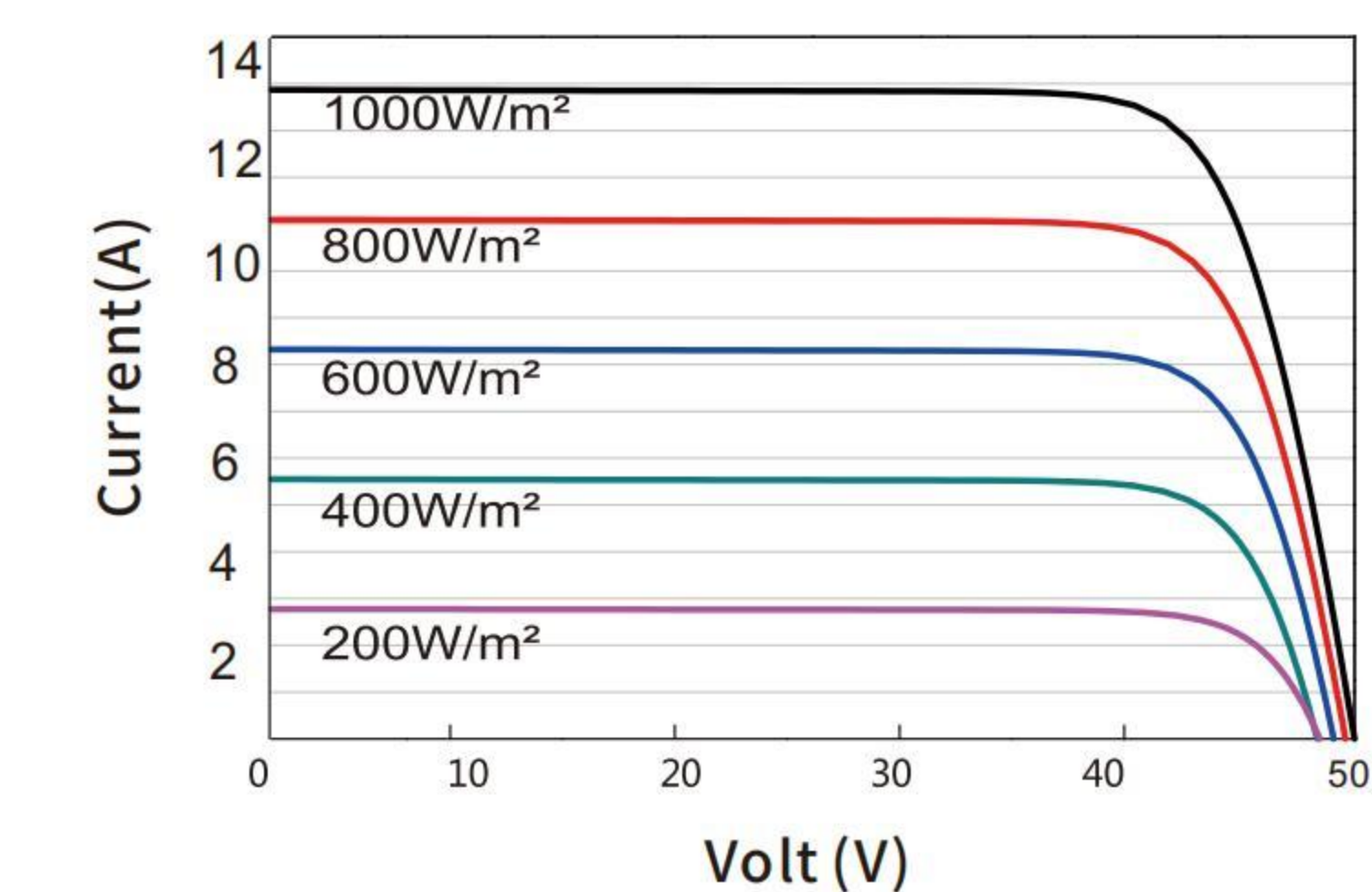
• Temperature Characteristics •

Operating Temp(°C)	-40-85
Operating Humidity(°C)	5-85
Hail Load Tolerance	25mm hailstone with velocity of 23m/s
Temp Coefficient	-0.350
Temp Coefficient Isc (%°C)	0.05
Temp Coefficient Voc (%°C)	-0.275
Operating Temp (°C)	44±2



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• I-V Curve •



• Packaging Info •

Pieces per Pallet	31
Size of Packaging(mm)	2130*1140*1190
Weight of per Pallet(kg)	754
Pieces per Container	682
Size of Container	40'HC

All data and specifications included in this brochure may subject to be modified without notice.
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