

Sun-Pursuit Series

Perc Bifacial
132 - cell Module

TW-510HC

490-510W

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.
- Double-sided electricity generation**
Power can be generated on both sides to support additional output gains of up to 25%. The multi-busbar half-cut technology can boost energy density to deliver higher output.

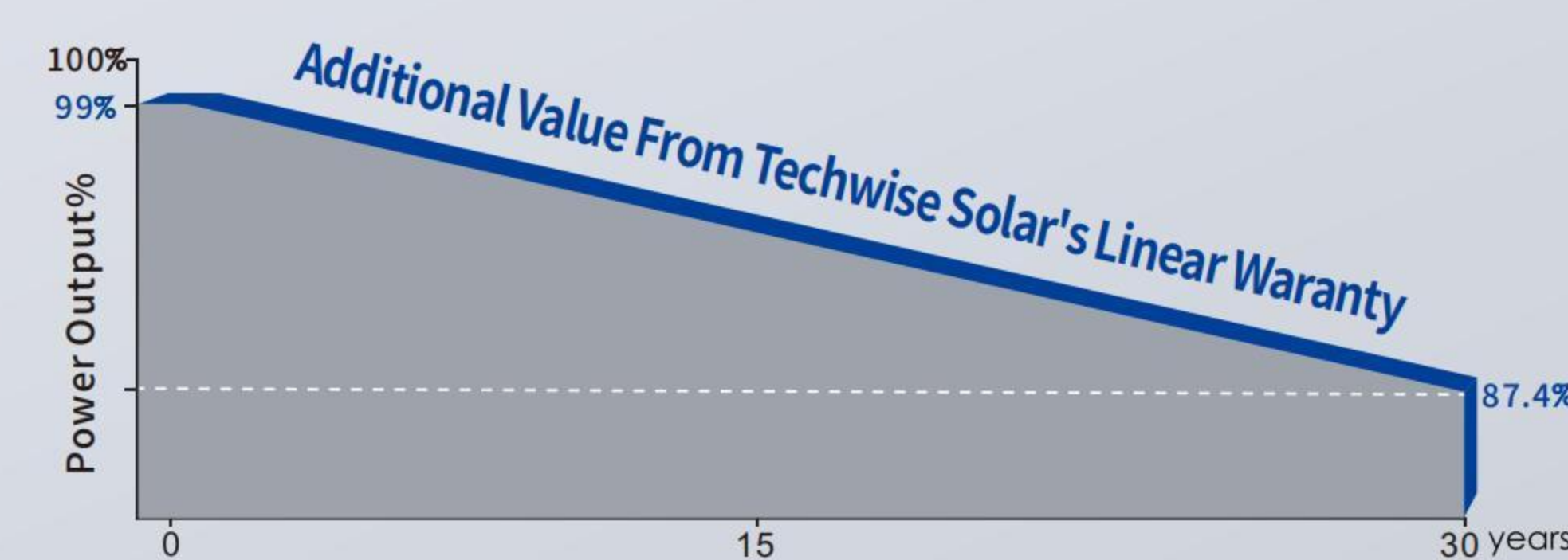
• Quality Certification



• Product Qualification



• Performance Warranty



15 15 Years Product Warranty

30 30 Years Linear Power Warranty

TW-510HC

• Module Specification •

Cell Type	Mono crystalline
Cell Quantity	132 cell
Cell Size (mm)	182*91
Module Size (mm)	2094*1134*35
Module Weight (kg)	30
Glass Thickness (mm)	2.0
Frame Material	Anodized aluminum alloy
Junction Box	IP68
Cable/Connector	4mm ² , MC4 compatible
Cable Length	+300mm/-300mm; or Customize
Max System Volt (V)	1500V DC
Max Fuse Rate (A)	25
Power Tolerance (%)	0+3%

• Electrical Characteristics •

STC standard performance >>>

Power Level	490	495	500	505	510
Pmax (W)	490	495	500	505	510
Vmp (V)	38.15	38.30	38.45	38.60	38.75
Imp (A)	12.85	12.93	13.01	13.09	13.16
Voc (V)	45.35	45.50	45.65	45.80	45.95
Isc (A)	13.76	13.83	13.91	13.98	14.06
Module Efficiency (%)	20.64	20.85	21.06	21.27	21.48

NOCT standard performance >>>

Power Level	490	495	500	505	510
Pmax (W)	369	373	377	381	384
Vmp (V)	34.98	35.16	35.34	35.51	35.69
Imp (A)	10.55	10.61	10.67	10.73	10.76
Voc (V)	42.45	42.56	42.73	42.87	43.23
Isc (A)	11.13	11.19	11.24	11.30	11.36

• Bifacial Output-backside Power Gain •

5% Pmax (W)	515	520	525	530	536
5% Module Efficiency	21.69	21.90	22.11	22.32	22.60
15% Pmax (W)	564	569	575	581	587
15% Module Efficiency	23.75	23.96	24.21	24.47	24.70
25% Pmax (W)	613	619	625	631	638
25% Module Efficiency	25.81	26.07	26.32	26.57	26.80

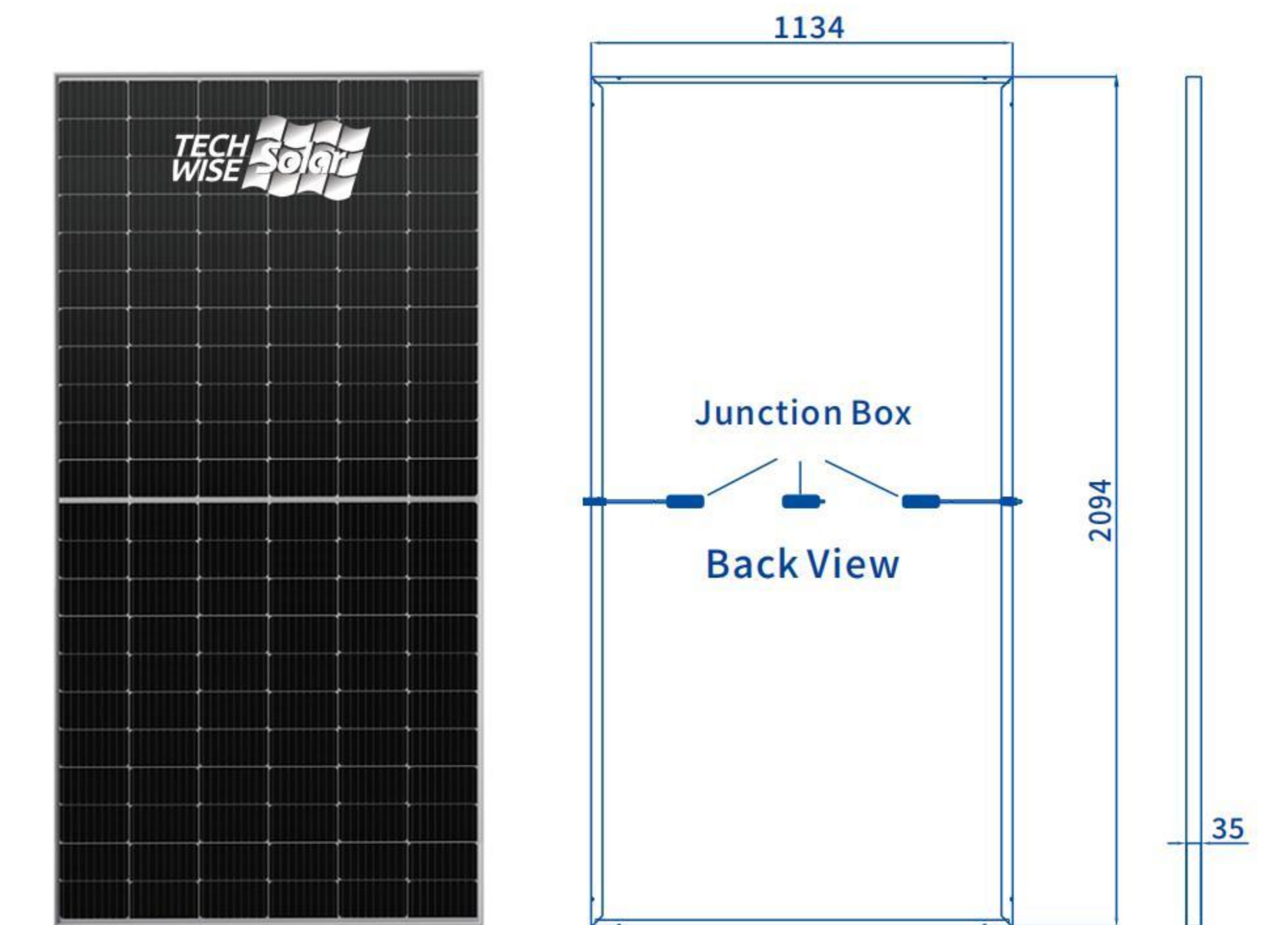
• Temperature Characteristics •

Operating Temp (°C)	-40~85
Operating Humidity (°C)	5~85
Hail Load Tolerance	25mm hailstone with velocity of 23m/s
Temp Coefficient	-0.35
Temp Coefficient Isc (%/°C)	0.05
Temp Coefficient Voc (%/°C)	-0.275
Operating Temp (°C)	44±2

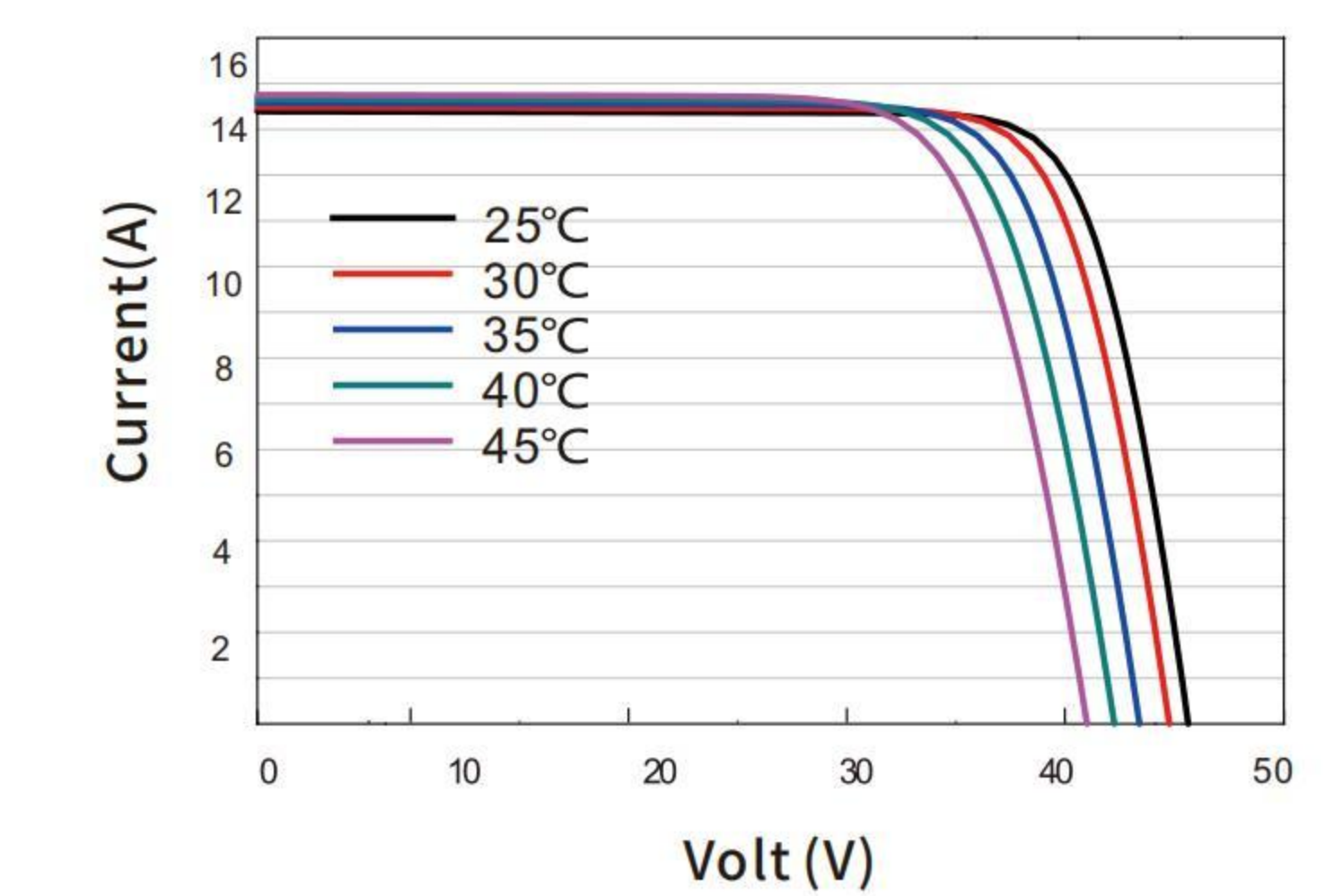
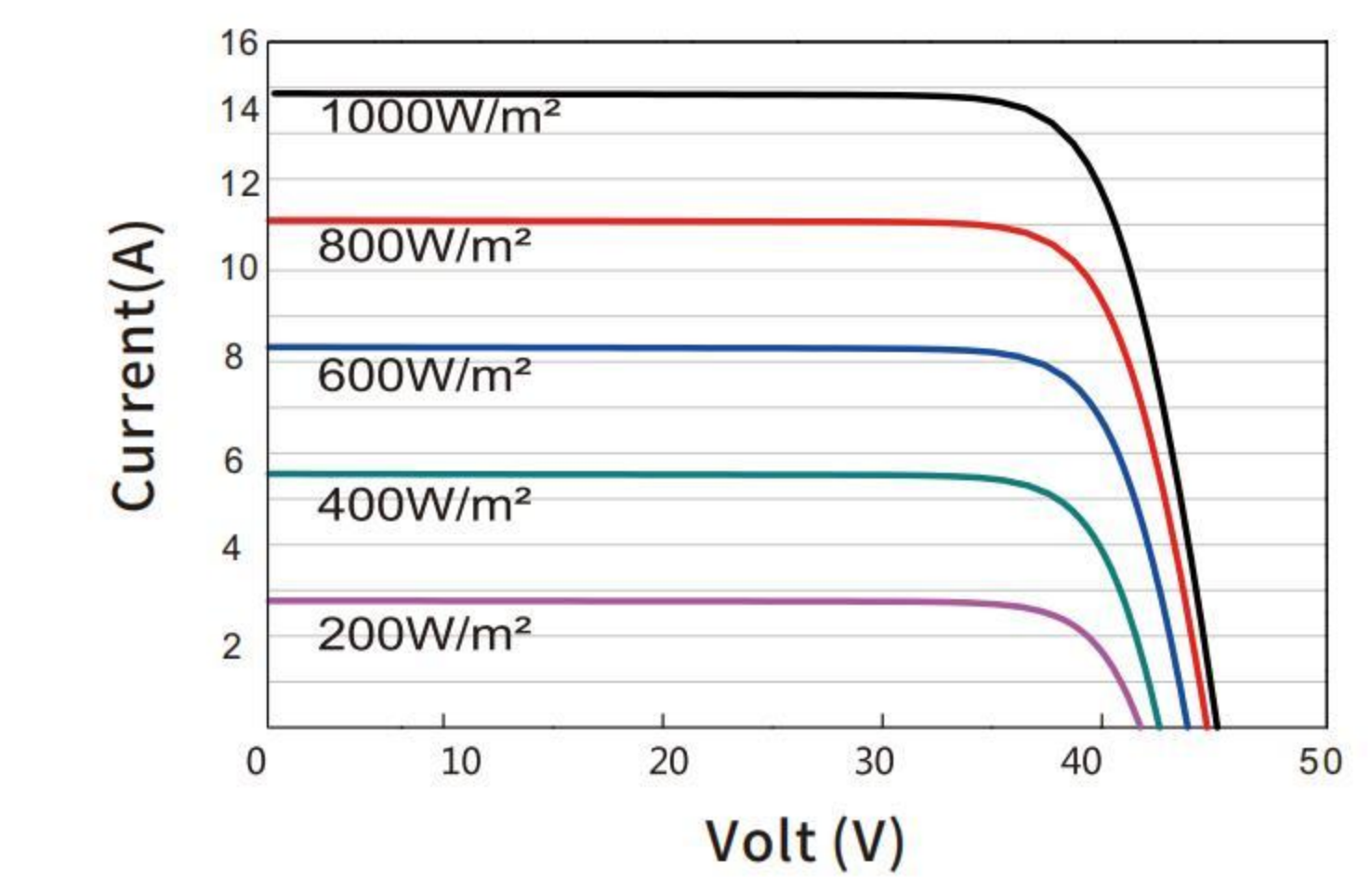


Add: Shangman Industrial Park, Caobu Town
Rudong County, Nantong City, Jiangsu Province, China
Tel: 86-513-81900128
Web: www.techwisesolar.com
Email: salesdept@techwisesolar.com

• Engineering Drawings •



• I-V Curve •



• Packaging Info •

Pieces per Pallet	31
Size of Packaging (mm)	2120*1125*1270
Weight of per Pallet (kg)	955
Pieces per Container	682
Size of Container	40'HC

All data and specifications included in this brochure may be subject to be modified without notice. All Rights reserved by TechWise Solar Co. (Mar 2024 V3 Edition)