

Sun-Pursuit Pro Series

TOPCon Bifacial
108 - cell Module

TW-440HD-1

420-440W

0-3% Positive Tolerance



Monocrystalline



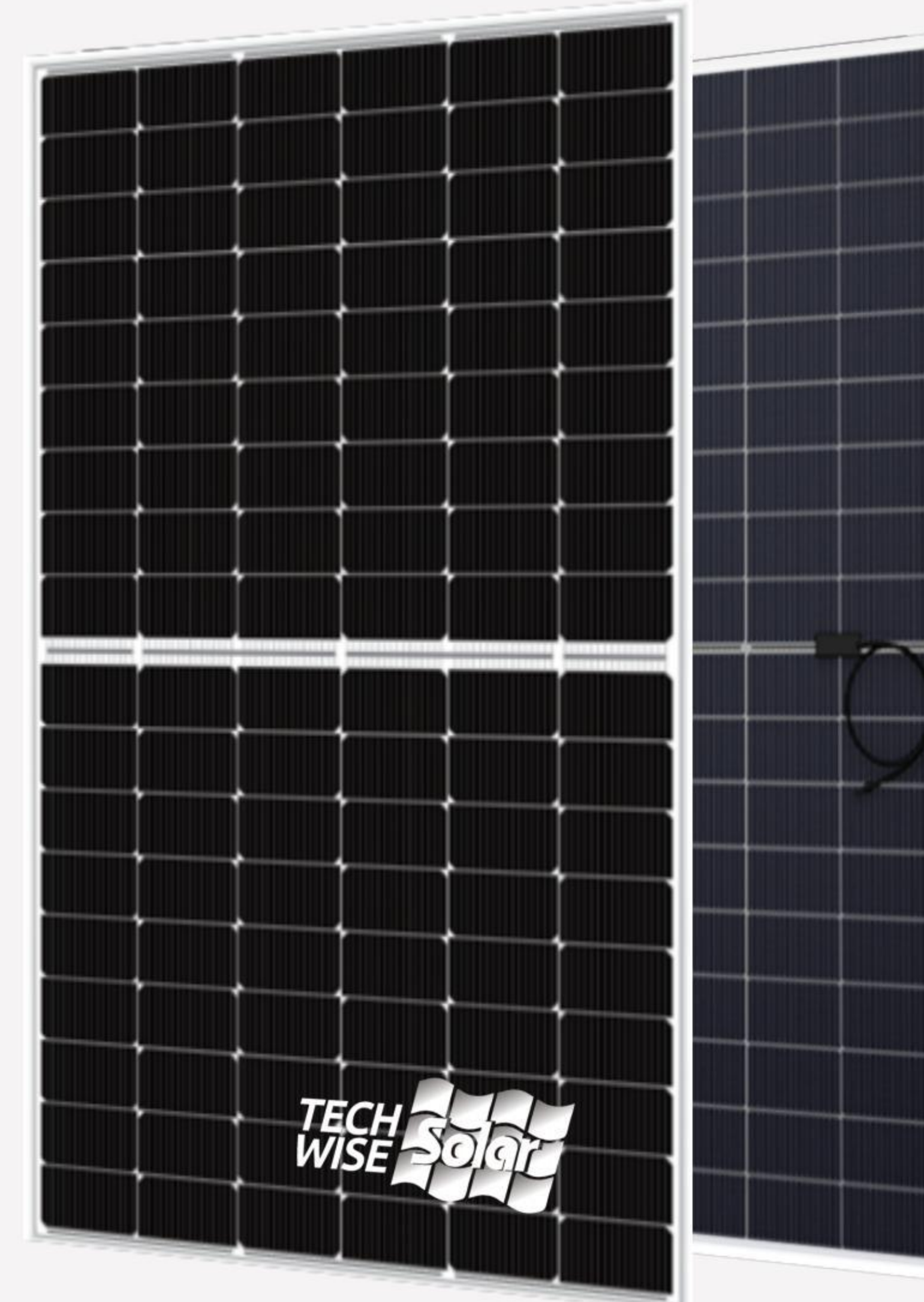
Half Cell



16BB



Grade A



• MODULE FEATURES

- High efficiency**
TOPCon 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.
- PID resistant**
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.

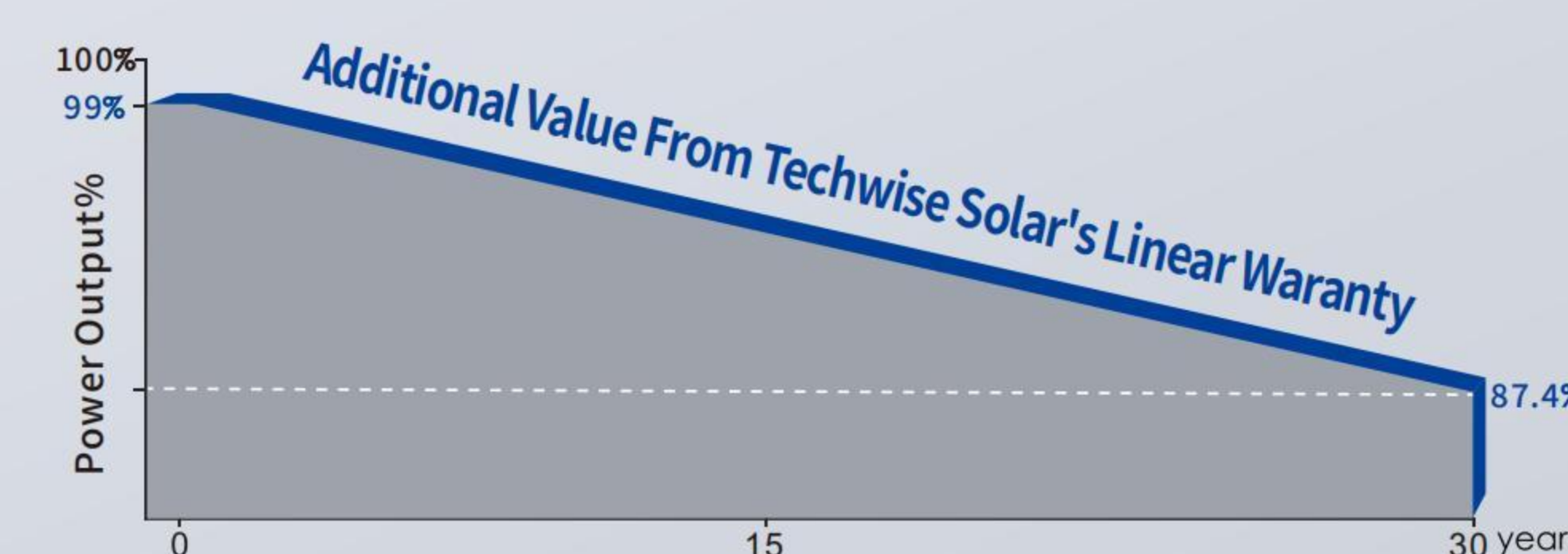
• Quality Certification



• Product Qualification



• Performance Warranty



15 15 Years Product Warranty

30 30 Years Linear Power Warranty

TW-440HD-1

• Product Specification •

Cell Type	Mono crystalline
Cell Quantity	108 cell
Cell Size (mm)	182*91
Module Size (mm)	1722*1134*30
Module Weight (kg)	24
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	420	425	430	435	440
Pmax (W)	420	425	430	435	440
Vmp (V)	31.46	31.64	31.84	32.02	32.20
Imp (A)	13.36	13.44	13.52	13.58	13.66
Voc (V)	38.02	38.20	38.38	38.56	38.74
Isc (A)	14.17	14.25	14.33	14.39	14.47
Module Efficiency (%)	21.51	21.76	22.02	22.28	22.53

NOCT standard performance >>>

Power Level	420	425	430	435	440
Pmax (W)	316	319	323	327	331
Vmp (V)	29.15	29.35	29.44	29.64	29.81
Imp (A)	10.85	10.91	10.98	11.04	11.11
Voc (V)	36.04	36.21	36.38	36.56	36.72
Isc (A)	11.50	11.57	11.63	11.70	11.77

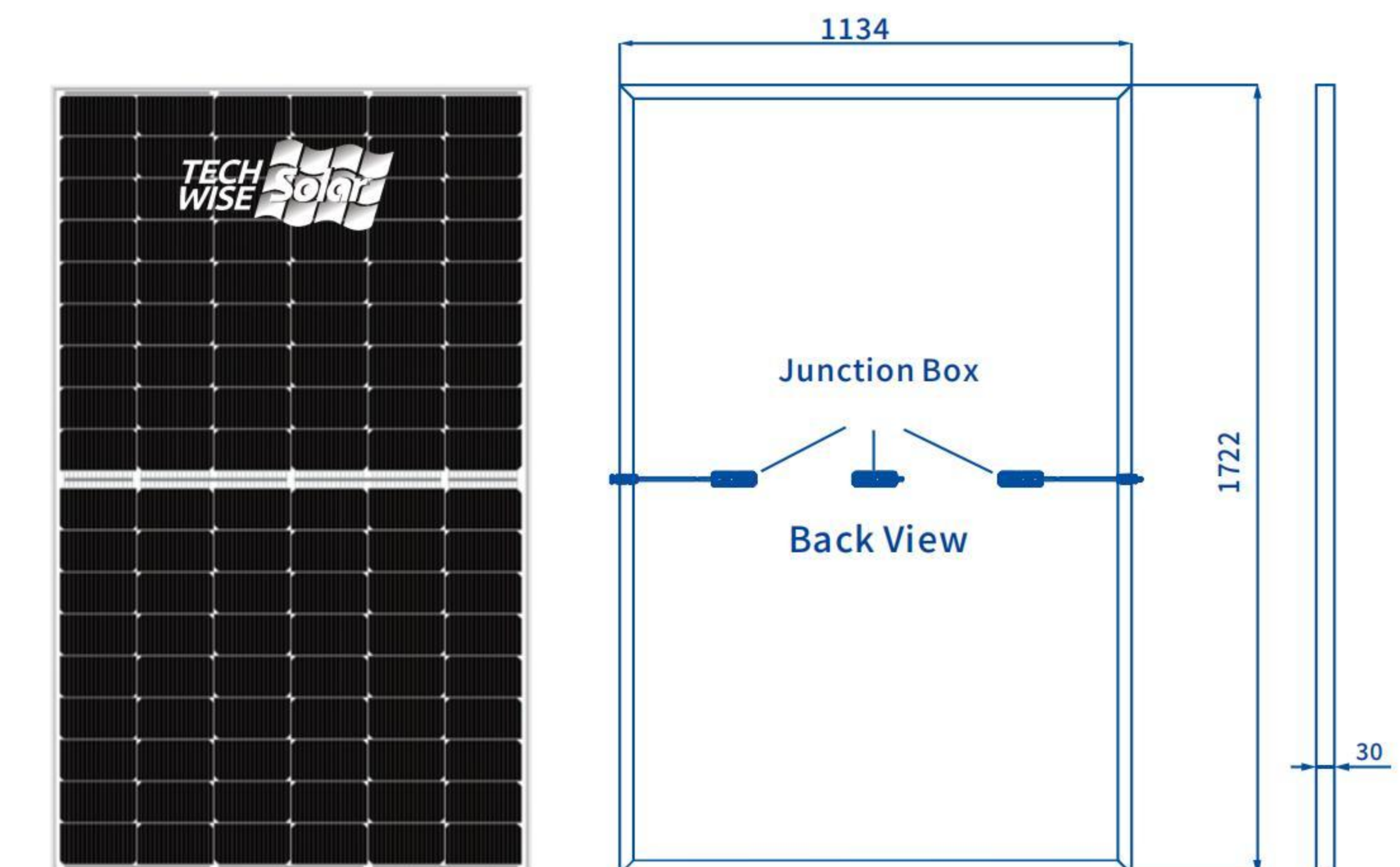
• Bifacial Output-backside Power Gain •

5% Pmax (W)	441	446	452	457	462
5% Module Efficiency	22.58	22.85	23.12	23.39	23.66
15% Pmax (W)	483	489	495	500	506
15% Module Efficiency	24.73	25.03	25.32	25.62	25.91
25% Pmax (W)	525	531	538	544	550
25% Module Efficiency	26.89	27.21	27.53	27.85	28.11

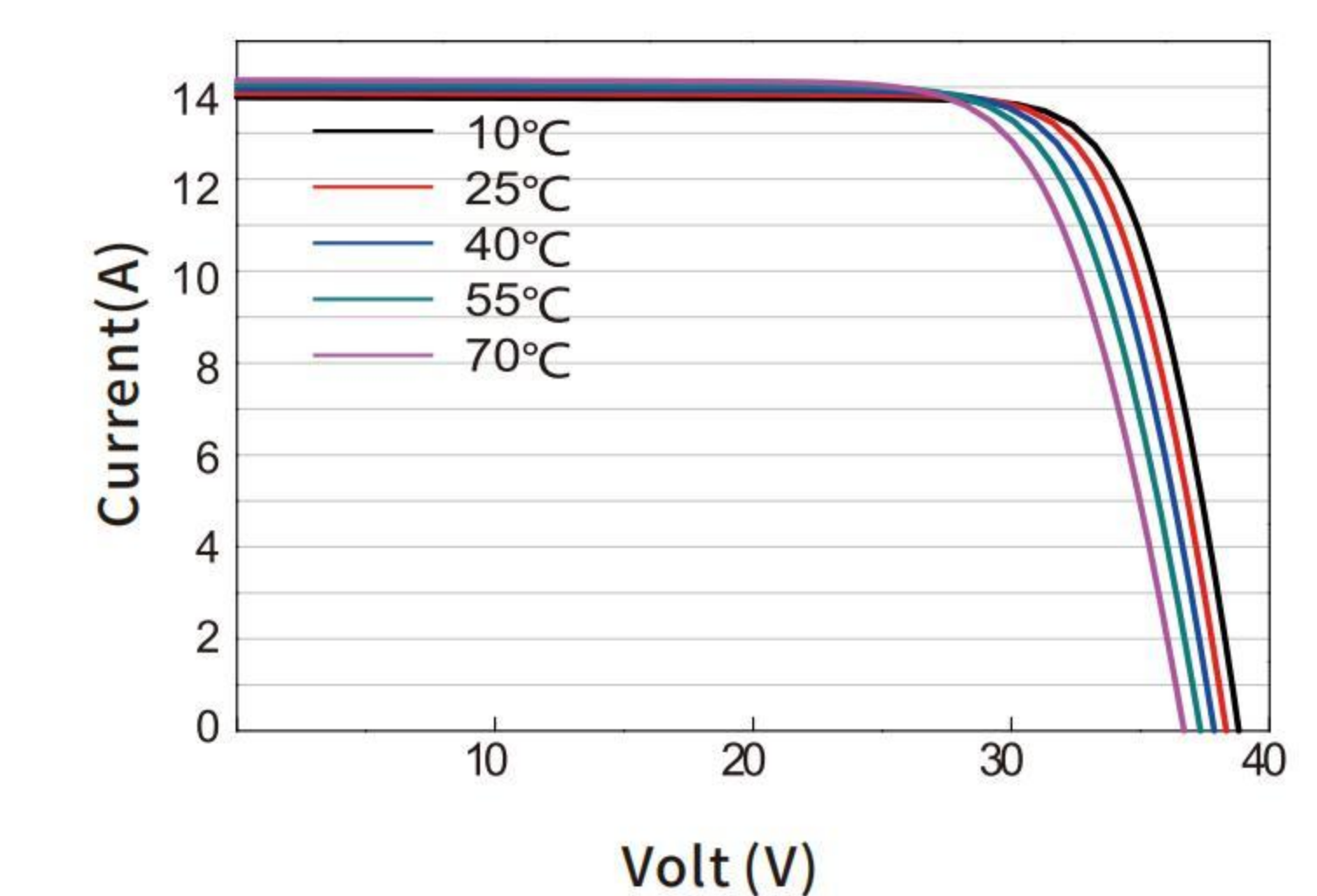
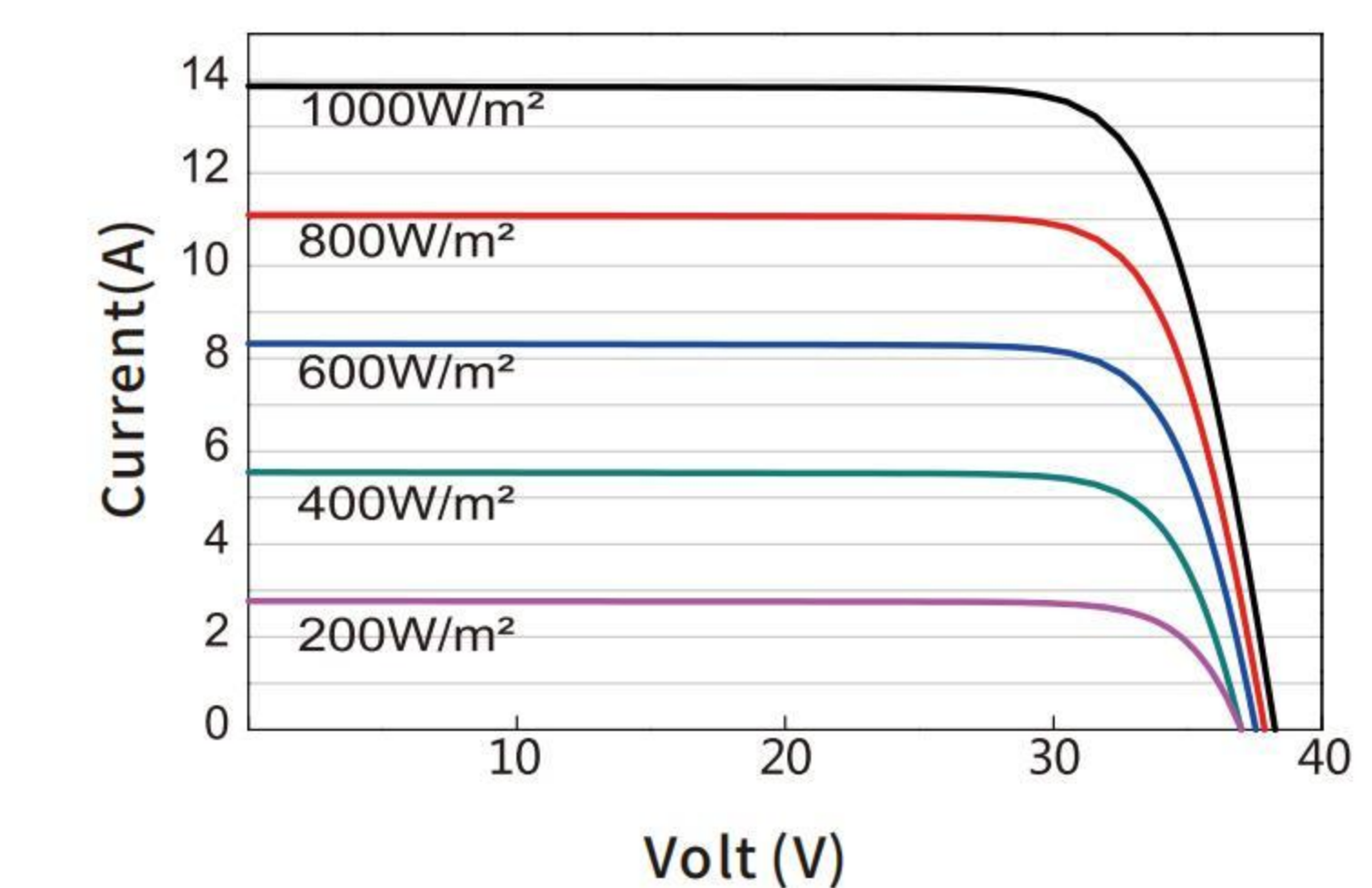
• Temperature Characteristics •

Operating Temp (°C)	-40~85
Operating Humidity (°C)	5~85
Hail Load Tolerance	25mm hailstone with velocity of 23m/s
Temp Coefficient	-0.340
Temp Coefficient Isc (%/°C)	0.04
Temp Coefficient Voc (%/°C)	-0.25
Operating Temp (°C)	44±2

• Engineering Drawings •



• I-V Curve •



• Packaging Info •

Pieces per Pallet	36
Size of Packaging (mm)	1750*1125*1270
Weight of per Pallet (kg)	889
Pieces per Container	936
Size of Container	40' HC



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

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