

EVO 5N

615-635W

SE5-78HBD

N-type TOPCon Ultra Black Bifacial Dual Glass Solar Module



22.72%
Max. Module Efficiency

10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.

ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation.

Higher Reliability

Adopted SunEvo latest S-TOPCo 2.0 technology, No polysilicon wrap around, Full electrical isolation, Zero leakage current; Much Safer for roof.

Better Weak Illumination Response

Higher power output even under low-light environments like on cloudy or foggy days.

Better Temperature Coefficient

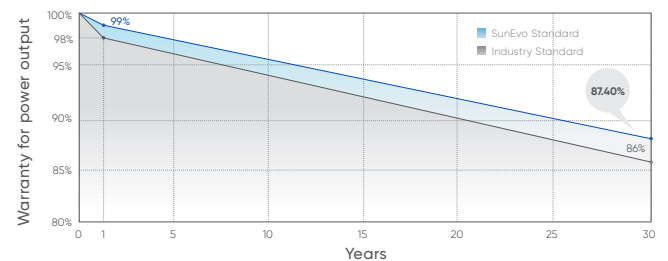
Higher power generation under working conditions, thanks to passivating contact cell technology.

Quality Management System and Product Certification

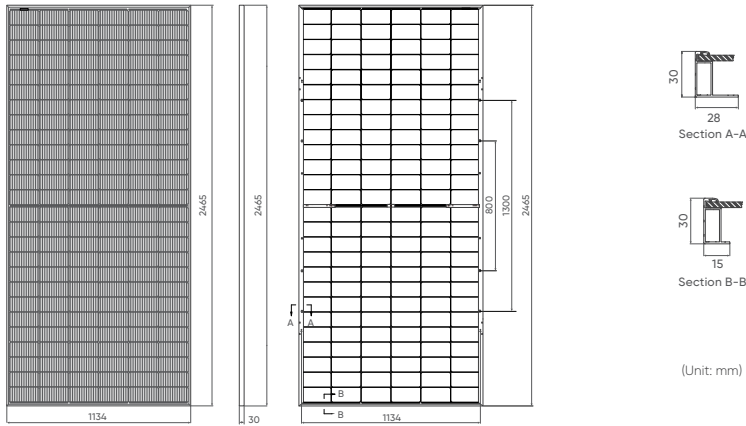
- IEC61215/61730, IEC62804(PID), IEC61701(Salt).
- IEC62716 (Ammonia), IEC60068-2-68(Sand).
- ISO 9001:2015/quality management system.
- ISO 14001:2015/environmental management system.
- ISO 45001:2018/occupation health safety management system.
- ISO 50001:2011/energy management system.
- IEC TS 62941-2016/PV industry quality management system.

Quality Guarantee

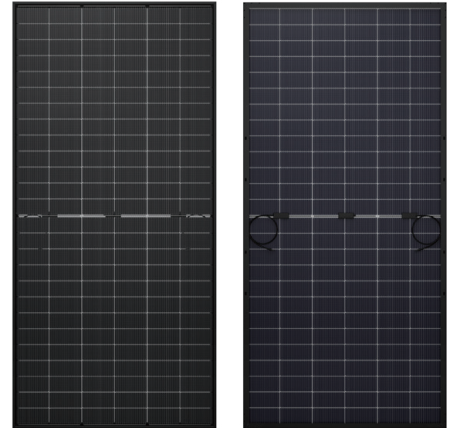
25 year Materials Warranty **30 year** Power Warranty



Drawings



Product Image



Mechanical Characteristics

Solar Cells	N-type Mono
No. of Cells	156 (6x26)
Dimensions	2465 x 1134 x 30mm
Weight	34.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back: 2.0mm semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm ² , 300mm (+) / 300mm (-), Length can be customized
Connectors	MC4 compatible
Mechanical Load Test	5400Pa
Packaging	36pcs/box, 144pcs/20'GP, 576pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500V DC (IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0~+5W

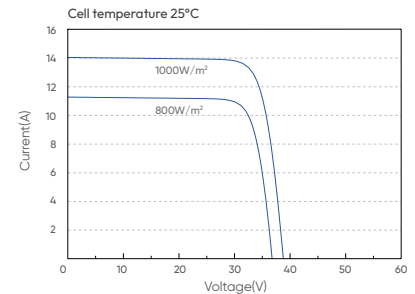
Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C

Electrical Parameters (STC*)

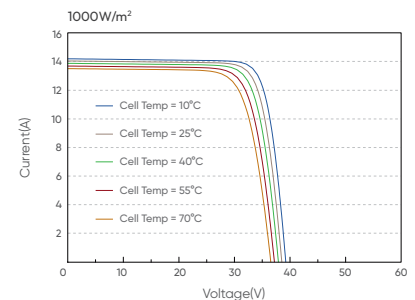
Module Type: SE5-78HBD	615	620	625	630	635
Maximum Power (Pmax/W)	615	620	625	630	635
Voltage at Maximum Power (Vmpp/V)	47.20	47.37	47.54	47.70	47.86
Current at Maximum Power (Impp/A)	13.03	13.09	13.15	13.21	13.27
Open Circuit Voltage (Voc/V)	56.69	56.82	56.95	57.08	57.21
Short Circuit Current (Isc/A)	13.68	13.74	13.80	13.86	13.92
Module Efficiency (%)	22.00	22.18	22.36	22.54	22.72

I-V Curve



Bifacial Output (Rearside Power Gain)

		615	620	625	630	635
5%	Maximum Power (Pmax/W)	646	651	656	662	667
	Module Efficiency STC (%)	23.10	23.29	23.48	23.66	23.85
15%	Maximum Power (Pmax/W)	707	713	719	725	730
	Module Efficiency STC (%)	25.30	25.51	25.71	25.92	26.12
25%	Maximum Power (Pmax/W)	769	775	781	788	794
	Module Efficiency STC (%)	27.50	27.73	27.95	28.17	28.40



1. Standard Test Conditions [STC]: irradiance 1000W/m², AM 1.5, ambient temperature 25°C according to EN 60904-3;
 2. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.