

EVO B

420-455W

SE5-54HBC

High Efficiency Back Contact
Solar PV Module



23.3% Max. Module Efficiency

High-efficiency Cells

The cell efficiency is higher than 25%.

Outstanding Performance

EVO B improves power generation capacity greatly with comprehensive upgrade of Back Contact cells and modules.

Aesthetic Appearance

EVO B simplifies the complexity and redefines the aesthetic concept of photovoltaic modules.

Market-leading Reliability

EVO B pioneers the adoption of full back welding technology to effectively improve the resistance to micro cracking of modules.

Optimized Balance of System (BOS)

Significant savings on mounting structure, cabling, and labour cost.

Quality Management System and Product Certification

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

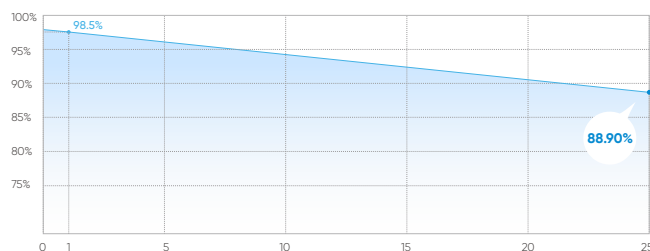
ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

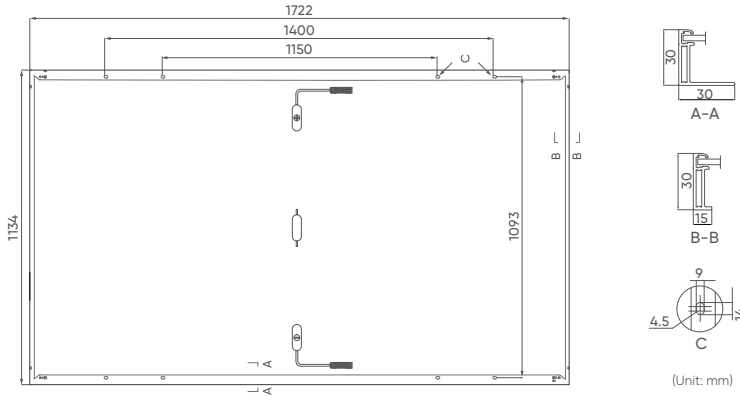
Quality Guarantee

15-year Warranty for Materials and Processing

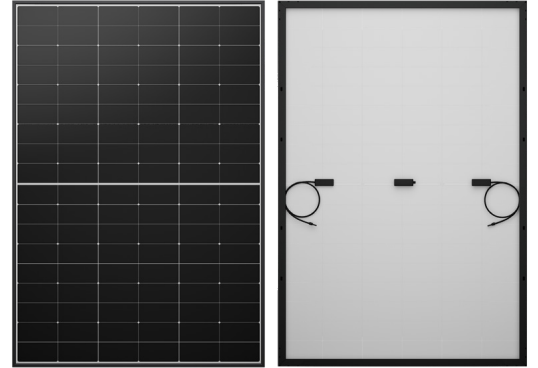
25-year Warranty for Extra Linear Power Output



Drawings



Product Image



Mechanical Characteristics

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , ±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimension	1722 × 1134 × 30mm
Packaging	36pcs per pallet / 216pcs per 20'GP / 936pcs per 40'HC
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Operating Parameters

Operational Temperature	-40°C~+85°C
Power Output Tolerance	0~3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C

Temperature Ratings (STC*)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C

Electrical Parameters (STC*)

Module Type: SE5-54HBC	420	425	430	435	440	445	450	455
Maximum Power (Pmax/W)	420	425	430	435	440	445	450	455
Open Circuit Voltage (Voc/V)	38.73	38.93	39.13	39.33	39.53	39.73	39.93	40.13
Short Circuit Current (Isc/A)	14.00	14.07	14.15	14.22	14.30	14.37	14.45	14.52
Voltage at Maximum Power (Vmp/V)	32.44	32.64	32.84	33.04	33.24	33.44	33.64	33.84
Current at Maximum Power (Imp/A)	12.95	13.03	13.10	13.17	13.24	13.31	13.38	13.45
Module Efficiency(%)	21.5	21.8	22.0	22.3	22.5	22.8	23.0	23.3

Electrical Parameters (NOCT*)

Maximum Power (Pmax/W)	314	318	321	325	329	332	336	340
Open Circuit Voltage (Voc/V)	36.36	36.55	36.74	36.93	37.11	37.30	37.49	37.68
Short Circuit Current (Isc/A)	11.31	11.36	11.43	11.49	11.55	11.61	11.67	11.73
Voltage at Maximum Power (Vmp/V)	29.60	29.78	29.97	30.15	30.33	30.51	30.70	30.88
Current at Maximum Power (Imp/A)	10.60	10.67	10.72	10.78	10.85	10.90	10.95	11.02

*STC: AM1.5 1000W/m² 25°C *NOCT: AM1.5 800W/m² 20°C 1m/s