



SP-3-54HGBD

470-500W

GBC Module with Dual Glass Black Frame

24.5%

Module Efficiency up to



Superior Temperature coefficient



Higher Generated Energy



Higher Reliability



Lower BOS



Excellent Micro-crack Resistance



High Temperature Restriction



Partial Shading Optimisation



Extraordinary Aesthetic Design

≤1% First-year Degradation

≤0.35% Annual Degradation



Product Warranty



Linear Power Warranty

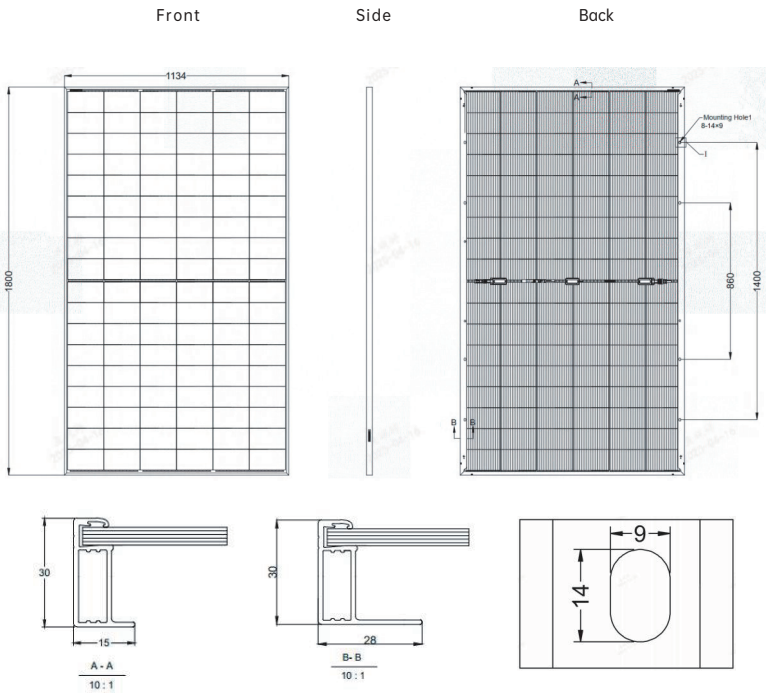


- Operating Temperature **-40°C ~ +85°C**
- Power Tolerance **0~+3%**
- Junction Box **IP68**
- NOCT **45±2°C**
- Maximum Series Fuse Rating **25A**
- Bifacial Factor **70±5%**
- Maximum System Voltage **1500V(IEC)**

Mechanical Parameters

Cell Type	GBC
No. of cells	108 (6×18)
Glass	Dual glass, 2.0 + 2.0mm coated semi tempered glass
Frame	Black anodized aluminum
Output Cables	TüV 1×4mm², (+)300mm, (-)200mm or Customized Length
Weight	24.8 kg (54.67 lbs)
Dimension	1800×1134×30mm
Connector	MC4 Compatible/MC4-Evo2
Packaging	37 pcs per pallet 222 pcs per 20' GP 888 pcs per 40' HC
Protection Class	Class II
Fire Rating	IEC Class A

Engineering Drawings

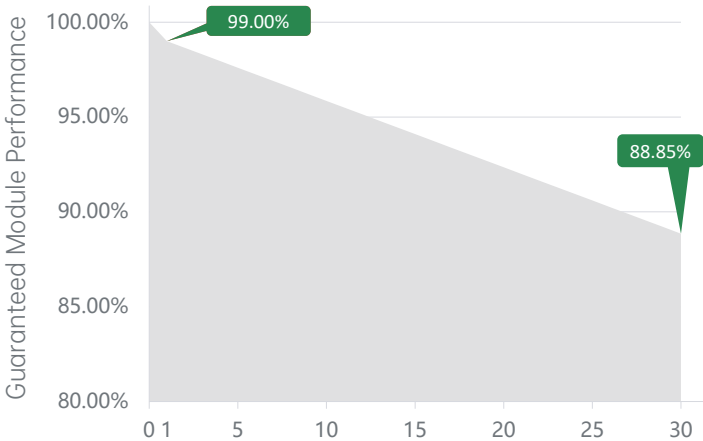


* L:±2mm W:±2mm Unit:mm

Electrical Characteristics (STC Test)

Module Type	SP-3-54HGBD-470M		SP-3-54HGBD-475M		SP-3-54HGBD-480M		SP-3-54HGBD-485M		SP-3-54HGBD-490M		SP-3-54HGBD-495M		SP-3-54HGBD-500M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	470	357	475	361	480	364	485	368	490	372	495	375	500	379
Open-circuit Voltage (Voc/V)	40.50	38.42	40.63	38.55	40.76	38.67	40.89	38.80	41.02	38.92	41.15	39.04	41.28	39.16
Maximum Power Voltage (Vmp/V)	33.64	31.92	33.74	32.01	33.84	31.11	33.94	32.20	34.04	32.30	34.14	32.40	34.24	32.49
Short-circuit Current (Isc/A)	14.82	11.97	14.89	12.03	14.96	12.09	15.03	12.15	15.10	12.21	15.17	12.26	15.24	12.32
Maximum Power Current (Imp/A)	13.98	11.17	14.09	11.27	14.19	11.35	14.30	11.44	14.40	11.51	14.50	11.59	14.60	11.67
Module Efficiency (%)	23.0		23.3		23.5		23.8		24.0		24.3		24.5	

1、STC: Irradiance 1000W/M², Cell Temperature25°C, AM=1.5 2、NOCT: Irradiance 800W/M², Ambient Temperature 20°C, AM=1.5, Wind Speed 1M/S



Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Pmax	-0.26%/°C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25 mm diameter hail at 23 m/s

