



182
HEX5

BSM550M10-72HBD

530~550W

BIFACIAL MODULE

BLUESUN SOLAR CO.,LTD

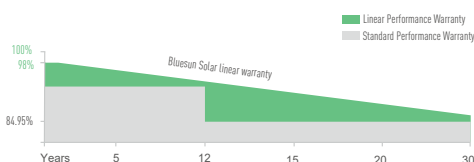
Bluesun, founded in 2004, as a superior photovoltaic manufacturer, is devoted to the R&D and the production of crystalline silicon solar cells and modules for 17 years. The company has its sales areas spread all over more than 100 countries and regions in the world, and the cumulative historical shipments exceeded 12 GW.

PERFORMANCE WARRANTY

12 Enhanced Product Warranty on Materials and Work man ship.

30 Linear Power Performance Warranty*

0.55% Annual Degradation Over 30 years no more than 0.55%



*According to the applicable Bluesun Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES

ISO 9001:2015 / Quality management system

ISO 14001:2015 / Standards for environmental

ISO 45001: 2018 / International standards for occupational health & safety

PRODUCT CERTIFICATES

IEC 61215 / IEC 61730 / UL 61730



THE IDEAL SOLUTION FOR:



High module conversion efficiency

Bifacial MBB Half Cell technology, up to 25% more yield depends on different conditions



Withstanding harsh environment

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control



Excellent weak light performance

More power output in weak light condition, such as cloudy, morning and sunset



Extended wind and snow load tests

Module certified to withstand extreme wind (2400 Pa) and snow loads (5400 Pa)

SPECIFICATIONS

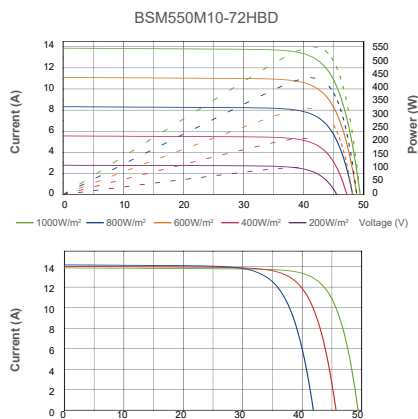
Module Type	BSM530M10-72HBD		BSM535M10-72HBD		BSM540M10-72HBD		BSM545M10-72HBD		BSM550M10-72HBD	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (P _{max} /W)	530	395	535	398	540	402	545	406	550	410
Operating Voltage (V _{mpp} /V)	41.32	38.6	41.48	38.7	41.64	38.8	41.80	39.0	41.96	39.1
Operating Current (I _{mpp} /A)	12.83	10.24	12.90	10.30	12.97	10.36	13.04	10.41	13.11	10.47
Open-Circuit Voltage (V _{oc} /V)	49.32	46.4	49.46	46.50	49.60	46.7	49.76	46.8	49.92	47.0
Short-Circuit Current (I _{sc} /A)	13.72	11.06	13.79	11.12	13.86	11.17	13.93	11.23	14.00	11.28
Module Efficiency η _m (%)	20.5		20.7		20.9		21.1		21.3	

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

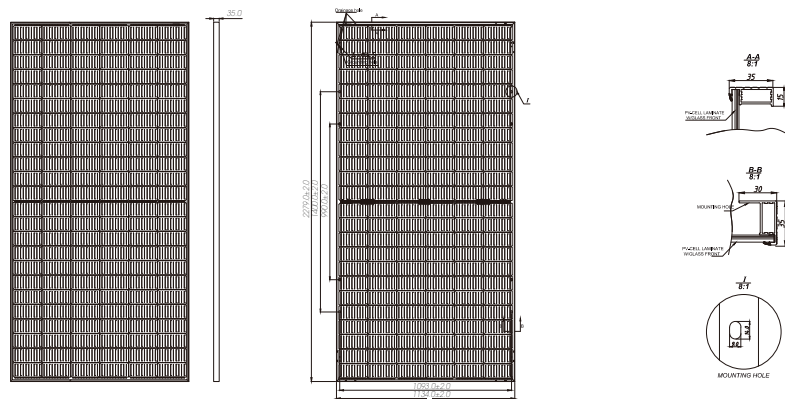
Electrical characteristics with different rear side power gain (refer to 530W front)

P _{max} gain	P _{max} /W	V _{mpp} /V	I _{mpp} /A	V _{oc} /V	I _{sc} /A
5%	557	41.32	13.47	49.32	14.41
10%	583	41.32	14.11	49.32	15.09
15%	610	41.32	14.75	49.32	15.78
20%	636	41.32	15.40	49.32	16.46
25%	663	41.32	16.04	49.32	17.15

I-V CURVE



ENGINEERING DRAWINGS



MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	32.2kg
Module Dimensions	2279*1134*35mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm ² (0.006inches ²)/UL: 12AWG
Front Glass	2.0 mm (0.08 inches) AR Coating Tempered Glass
Back Glass	2.0mm (0.08 inches) Glazed Semi-tempered Glass
No. of Bypass Diodes	3
Packing Configuration	31pcs/carton, 620pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximum System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C~ +85°C
Maximum Series Fuse	30A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2
Backside Output Ratio*	70%±5%

*Under STC: Backside Output Ratio= P_{max(rear)} / P_{max(front)}

TEMPERATURE COEFFICIENT

Temperature Coefficient P _{max}	-0.35%/°C
Temperature Coefficient V _{oc}	-0.26%/°C
Temperature Coefficient I _{sc}	+0.048%/°C
NMOT	43±2°C

*Data contained in these specifications is subject to change without notice. Bluesun Solar reserves the right to final interpretation of content.