



BSM550M10-72HBD

Bifacial Dual Glass-550W
LEADING 5%-25% MORE YIELD
EFFICIENCY UP TO 21.2%



Made In Thailand



- Dimensions: 2285*1134*35mm
- Weight: 32.2kg
- Max. System Voltage: 1500 V/DC(IEC)

PERFORMANCE WARRANTY

- 12** Years Enhanced Product Warranty on Materials and Workmanship
- 30** Years Linear Power Performance Warranty According to the applicable Bluesun Solar Limited Warranty Statement.

GREAT PERFORMANCE AND RELIABILITY

- ★ Bi-facial Perc Half Cut Technology
- ★ Better Energy Yield
- ★ Power Degradation -0.45%/30 Years Linear Warranty
- ★ TUV SUD Anti PID Certificated
- ★ IP68 Junction Box/High Water Proof Level
- ★ Reduced Hot Spot Risk

MANAGEMENT SYSTEM CERTIFICATES

- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / IEC 61701 / IEC TS 62804
- UL 1703 / UL61730



ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	530	535	540	545	550
Operating Voltage (Vmpp/V)	41.32	41.48	41.64	41.80	41.96
Operating Current (Imp/A)	12.83	12.90	12.97	13.04	13.11
Open-Circuit Voltage (Voc/V)	49.32	49.46	49.60	49.76	49.92
Short-Circuit Current (Isc/A)	13.72	13.79	13.86	13.93	14.00
Module Efficiency ηm(%)	20.5	20.6	20.8	21.0	21.2

Performance at NMOT

Maximum Power (Pmax/W)	395	398	402	406	410
Operating Voltage (Vmpp/V)	38.6	38.7	38.8	39.0	39.1
Operating Current (Imp/A)	10.24	10.30	10.36	10.41	10.47
Open-Circuit Voltage (Voc/V)	46.4	46.5	46.7	46.8	47.0
Short-Circuit Current (Isc/A)	11.06	11.12	11.17	11.23	11.28

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)

Pmax gain	Pmax/W	Vmpp/V	Imp/A	Voc/V	Isc/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

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	32.2kg
Module Dimensions	2285*1134*35mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm ² (0.006inches ²)/UL: 12AWG
Front Glass	2.0mm (0.08 inches) AR Coating Semi-tempered Glass
Back Glass	2.0mm (0.08 inches) Glazed Semi-tempered Glass
No. of Bypass Diodes	3
Packing Configuration (1)	31pcs/carton, 620pcs/40hq
Packing Configuration (for USA)	31pcs/carton, 558pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

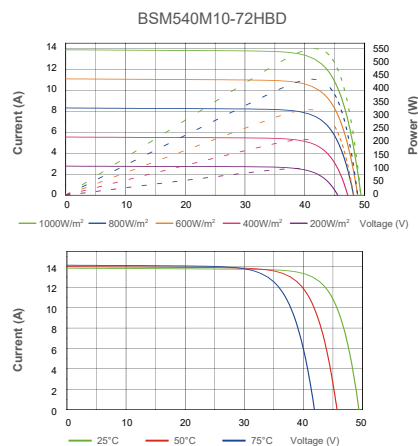
OPERATING CONDITIONS

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 = $P_{\max(\text{rear})} / P_{\max(\text{front})}$	

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.35%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.048%/°C
NMOT	43±2°C

I-V CURVE



TECHNICAL DRAWINGS

