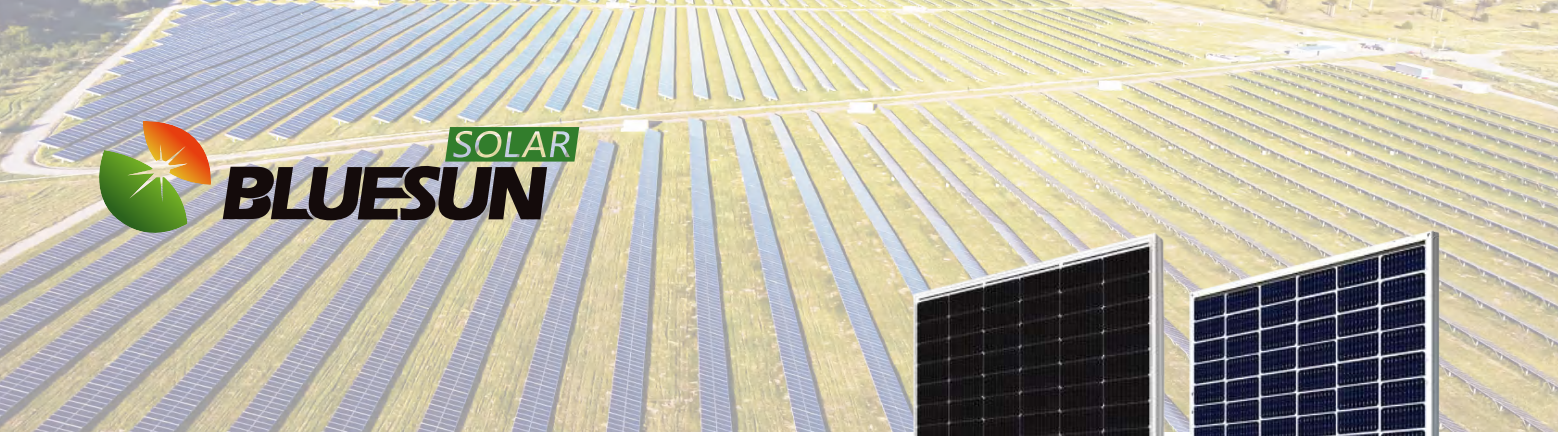


BSM460M-72HBD

NEW



FRONT BACK

BI-FACIAL MONO PERC 440 W- 460 W
LEADING 5%-25% MORE YIELD /
EFFICIENCY UP TO 21.2%

Made In Thailand

US Local Service/Inventory

Same Day Shipping

- Dimensions:2094*1038*30mm
- Weight:28kg
- Max. System Voltage: 1500 V (IEC/UL)

PERFORMANCE WARRANTY

15 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 / UL 61730

BLUESUN SOLAR CO.,LTD
Add:1499 Zhenxing Road, Shushan District,230031 Hefei,China
Tel:+86 (158) 5821 3997 Fax:+86 (551) 6520 3660
E-mail:info@bluesunpv.com Http://www.bluesunpv.com

US Warehouse Location: Long Beach, Chicago, New Jersey Etc

ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	440	445	450	455	460
Operating Voltage (Vmpp/V)	41.6	41.8	42.0	42.2	42.4
Operating Current (Impp/A)	10.58	10.65	10.72	10.79	10.86
Open-Circuit Voltage (Voc/V)	50.0	50.2	50.4	50.6	50.8
Short-Circuit Current (Isc/A)	11.22	11.29	11.36	11.43	11.50
Module Efficiency ηm(%)	20.2	20.5	20.7	20.9	21.2

Performance at NMOT

Maximum Power (Pmax/W)	327	330	334	337	341
Operating Voltage (Vmpp/V)	38.9	39.1	39.3	39.4	39.6
Operating Current (Impp/A)	8.41	8.47	8.52	8.57	8.62
Open-Circuit Voltage (Voc/V)	46.8	46.9	47.1	47.3	47.5
Short-Circuit Current (Isc/A)	9.04	9.10	9.16	9.21	9.27

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

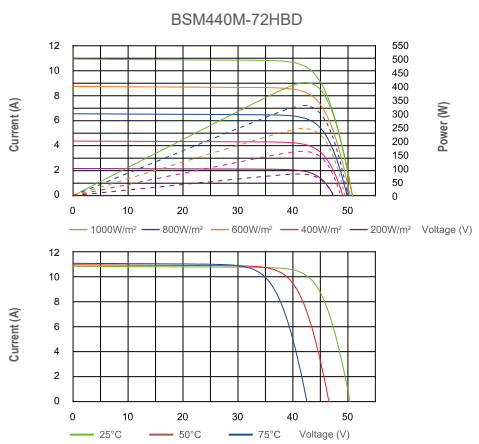
Electrical characteristics with different rear side power gain (refer to 440W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	462	41.6	11.11	50.0	11.78
10%	484	41.6	11.64	50.0	12.34
15%	506	41.6	12.17	50.0	12.90
20%	528	41.6	12.70	50.2	13.46
25%	550	41.6	13.23	50.2	14.03

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	166*166mm
Cell Arrangement	144 (6*24)
Weight	28kg (61.73lbs)
Module Dimensions	2094*1038*30mm (82.44*40.87*1.18inches)
Cable Length (Portrait)	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TUV: 4mm² (0.006inches²)/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	3/6
Packing Configuration (1)	35pcs/carton, 770pcs/40hq
Packing Configuration (for USA)	35pcs/carton, 630pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

I-V CURVE



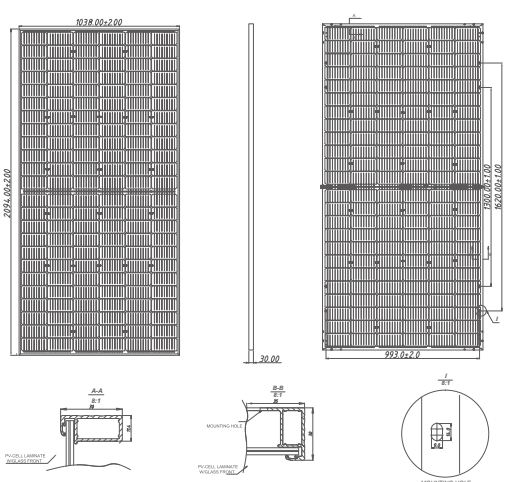
OPERATING CONDITIONS

Maximun System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	25A
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* *Under STC: Backside Output Ratio = $P_{max(rear)}$ /$P_{max(front)}$	70% ± 5%

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	43±2°C

TECHNICAL DRAWINGS



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