



182
HEX5
BIFACIAL MODULE

BSM600M10-72HNH

590-610W

HALF CELL PERC

BLUESUN SOLAR CO.,LTD

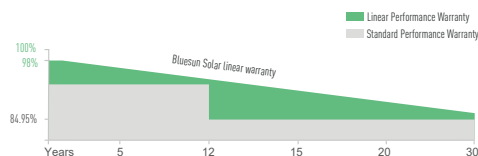
Bluesun, founded in 2004, as a superior photovoltaic manufacturer, is devoted to the R&D and the production of crystalline silicon solar cells and modules for 17 years. The company has its sales areas spread all over more than 100 countries and regions in the world, and the cumulative historical shipments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

PERFORMANCE WARRANTY

12 Enhanced Product Warranty on Materials and Workmanship.

30 Linear Power Performance Warranty*

0.45 Annual Degradation Over 30 years no more than 0.45%



*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



THE IDEAL SOLUTION FOR:



Ground-mounted solar power plants



High module conversion efficiency

Bifacial MBB Half Cell technology, up to 23.54% 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

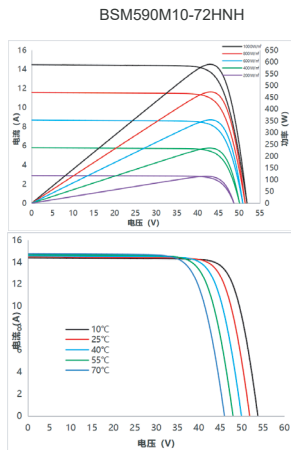
Module Type	BSM590M10-72HNNH		BSM595M10-72HNNH		BSM600M10-72HNNH		BSM605M10-72HNNH		BSM610M10-72HNNH	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (P _{max} /W)	590	448	595	452	600	456	605	460	610	464
Operating Voltage (V _{mp} /V)	43.41	41.21	43.59	41.43	43.77	41.65	43.95	41.87	44.13	42.09
Operating Current (I _{mp} /A)	13.59	10.87	13.65	10.91	13.71	10.95	13.77	10.99	13.82	11.02
Open-Circuit Voltage (V _{oc} /V)	50.87	47.75	50.99	47.88	51.11	48.01	51.23	48.14	51.35	48.27
Short-Circuit Current (I _{sc} /A)	14.56	11.57	14.63	11.62	14.70	11.67	14.77	11.72	14.84	11.77
Module Efficiency η m(%)	22.77		22.96		23.16		23.35		23.54	

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

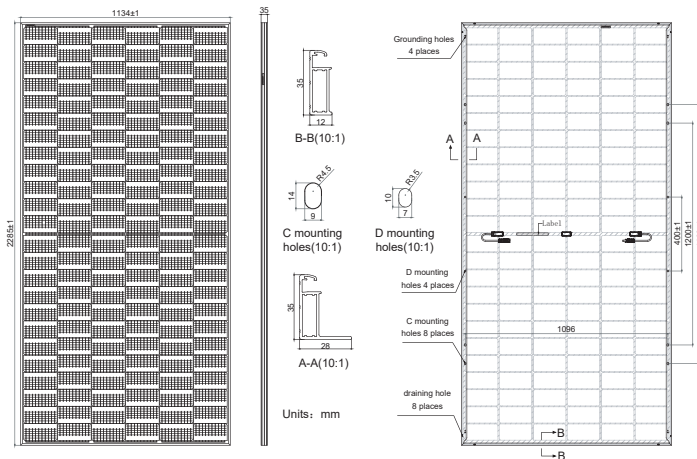
Electrical characteristics with different rear side power gain

5%	Maximum Power(P _{max} /W)	620	625	630	635	641
	Module Efficiency	23.91	24.11	24.31	24.52	24.72
15%	Maximum Power(P _{max} /W)	679	684	690	696	702
	Module Efficiency	26.18	26.41	26.63	26.85	27.07
25%	Maximum Power(P _{max} /W)	738	744	750	756	763
	Module Efficiency	28.46	28.70	28.94	29.19	29.43

I-V CURVE



ENGINEERING DRAWINGS



MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	31.6kg±3%
Module Dimensions	2285X1134X35mm
Cable Length	Portrait 300mm/Landscape
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

Maximun System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C~ +85°C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Safety Class	II
Connector	MC4/MC4-EVO2
Backside Output Ratio*	70%±10%

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

TEMPERATURE COEFFICIENT

Temperature Coefficient P _{max}	-0.35%/°C
Temperature Coefficient V _{oc}	-0.275%/°C
Temperature Coefficient I _{sc}	+0.045%/°C
NMOT	45±2°C

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