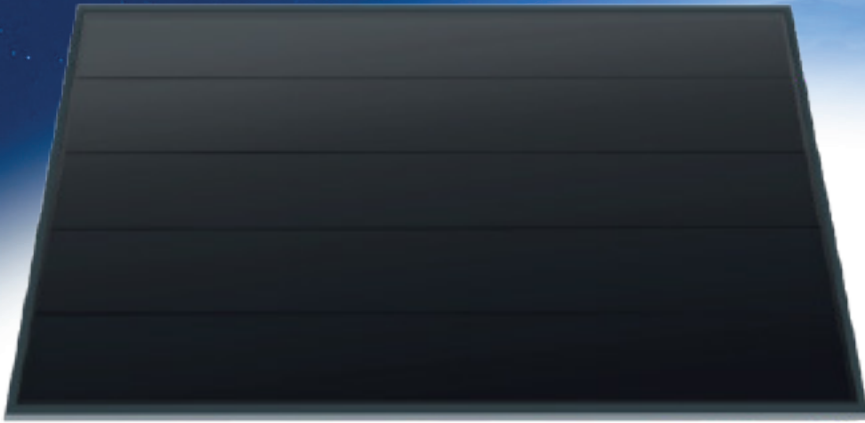




BSM440PMB7-46SC
420-440W
SHINGLED PERC

Features

- 
Shingled Technology
 Innovative structure with low-temperature adhesive bonding and a high-density layout.
- 
Beautiful Apperance
 Deep black, uniform layout for enhanced aesthetics.
- 
Compact Design
 Up to 440 Wp output within 2 m².
- 
Low System Cost
 High module efficiency, reducing system cost.
- 
Low Shading Loss
 Full parallel arrangement maximizes effective power generation hours.
- 
The ideal solution for:
 Rooftop arrays on residential buildings.

PERFORMANCE WARRANTY

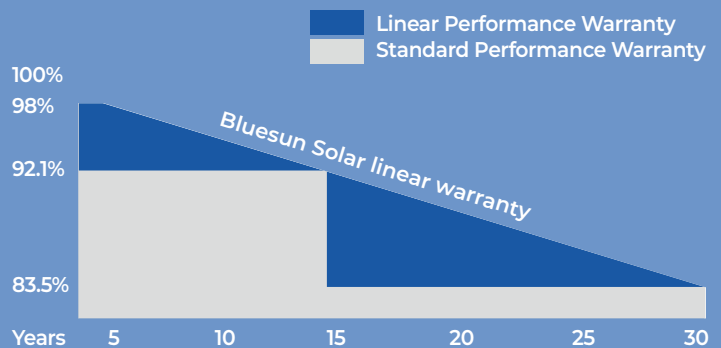
15year
Quality Warranty

30year
Performance Warranty

0.55%

Annual Degradation Over 30 years no more than 0.55%

Founded in 2004, Bluesun is a leading photovoltaic manufacturer dedicated to the research, development, and production of crystalline silicon solar cells and modules for 17 years. The company has sales in over 100 countries and regions worldwide, with cumulative historical shipments exceeding 12 GW.



*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 / CE



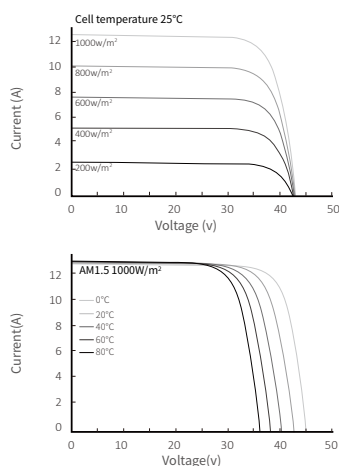
SPECIFICATIONS

Module Type	BSM420PMB7-46SC		BSM425PMB7-46SC		BSM430PMB7-46SC		BSM435PMB7-46SC		BSM440PMB7-46SC	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (P _{max} /W)	420	316	425	320	430	324	435	328	440	332
Operating Voltage (V _{mp} /V)	34.5	32.9	34.6	33.0	34.7	33.1	34.8	33.2	34.9	33.3
Operating Current (I _{mp} /A)	12.19	9.62	12.30	9.70	12.39	9.79	12.50	9.88	12.60	9.97
Open-Circuit Voltage (V _{oc} /V)	41.6	39.7	41.7	39.8	41.8	39.9	41.9	40.0	42.0	40.1
Short-Circuit Current (I _{sc} /A)	12.92	10.41	13.03	10.50	13.14	10.60	13.26	10.71	13.37	10.82
Module Efficiency η _m (%)	21.1		21.4		21.7		21.9		22.2	

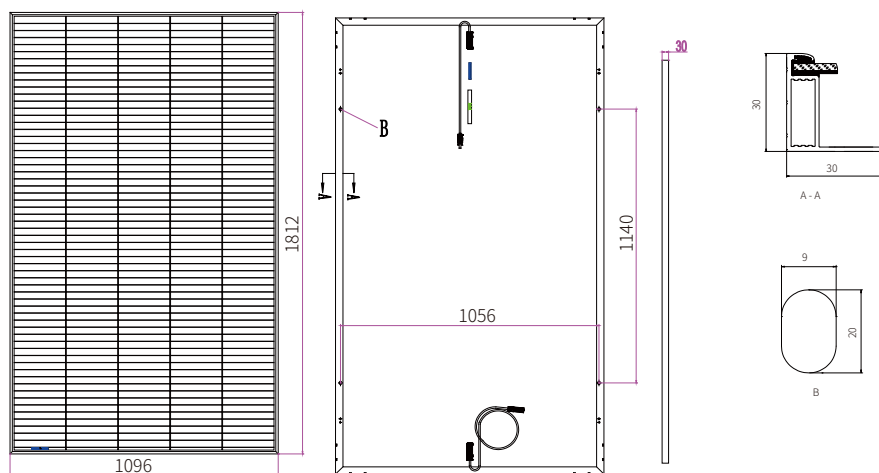
STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Air Mass AM 1.5, Wind Speed 1m/s

I-V CURVE



ENGINEERING DRAWINGS



MECHANICAL SPECIFICATION

Cell Type	Mono-crystalline solar cell
Weight	21.2kg
Module Dimensions	1812*1096*30mm
Cable Length	+300mm/-1000mm(Vertical) +220mm/-180mm(Horizontal)
Cable Cross Section Size	TUV: 4mm ² (0.006inches ²)/UL: 12AWG
Front Glass	3.2mm (0.13inches) AR Coating Tempered Glass
No. of Bypass Diodes	2
Packing Configuration	36pcs/carton, 924pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximum System Voltage	1500/1000V DC(IEC)
Operating Temperature	-40°C~ +85°C
Maximum 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

TEMPERATURE COEFFICIENT

Temperature Coefficient P _{max}	-0.34%/°C
Temperature Coefficient V _{oc}	-0.27%/°C
Temperature Coefficient I _{sc}	+0.04%/°C
NMOT	42.3±2°C

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