



QUNA **BLACK**
MONOFACIAL MODULE

BSM440PMB7-46SC

420~440W
N-type SHINGLED

MANAGEMENT SYSTEM CERTIFICATES

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental
ISO 45001: 2018 / International standards for occupational health & safety



Shingled Technology

Innovative structure, low -temperature adhesive bonding, high-density layout



Lower LID

N-type with lower LID



Beautiful Appearance

Deep black, uniform layout, better aesthetic



Compact Design

Upto 440Wp output within 2m² perfect for residential rooftop



Low System Cost

High module efficiency, reducing system cost



Low Shading Loss

Full parallel arrangement brings high effective power generation hours

PRODUCT CERTIFICATES

IEC 61215 / IEC 61730 / CE



THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

PERFORMANCE WARRANTY

15

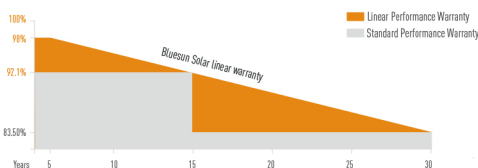
Enhanced Product Warranty on Materials and Workmanship.

30

Linear Power Performance Warranty*

0.55%

Annual Degradation Over 30 years no more than 0.55%

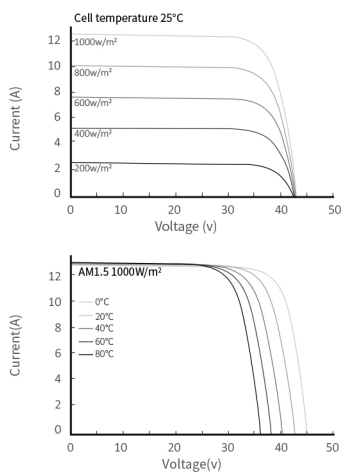


SPECIFICATIONS

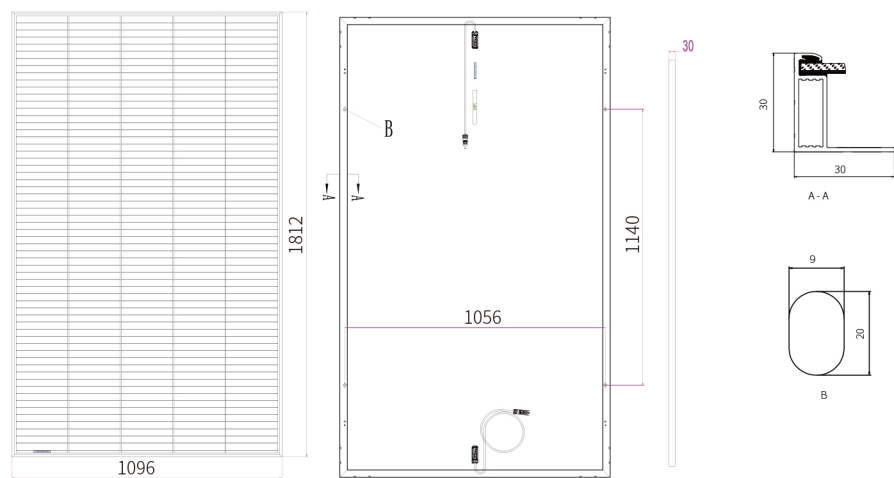
Module Type	BSM420PMB7-46SC		BSM425PMB7-46SC		BSM430PMB7-46SC		BSM435PMB7-46SC		BSM440PMB7-46SC	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power (Pmax/W)	420	316	425	320	430	324	435	328	440	332
Operating Voltage (Vmp/V)	34.5	32.9	34.6	33.0	34.7	33.1	34.8	33.2	34.9	33.3
Operating Current (Imp/A)	12.19	9.62	12.30	9.70	12.39	9.79	12.50	9.88	12.60	9.97
Open-Circuit Voltage (Voc/V)	41.6	39.7	41.7	39.8	41.8	39.9	41.9	40.0	42.0	40.1
Short-Circuit Current (Isc/A)	12.92	10.41	13.03	10.50	13.14	10.60	13.26	10.71	13.37	10.82
Module Efficiency η (%)	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 AM1.5, Wind Speed 1m/s

I-V CURVE



ENGINEERING DRAWINGS



MECHANICAL SPECIFICATION

Cell Type	N-type monocrystalline
Weight	21.2kg
Module Dimensions	1812*1096*30mm
Cable Length	+300mm/-1000(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 Pmax	-0.34%/°C
Temperature Coefficient Voc	-0.27%/°C
Temperature Coefficient Isc	+0.04%/°C
NMOT	42.3±2°C