Solar PV Modules



Mono PERC Solar PV Modules 50-125 W







Increased module power output.



Superior price performance ratio.



Maximum system voltage of 1000 V DC.



Reduced BOS cost.



Better light conversion effciency.



Easy installation & handling for various application.

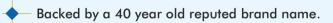


Low resistive power losses.



Lower temperature co-effcient.

Why Bluebird?





Intensive R&D, and stringent QC.

Highest standards of product performance.

Robust supply chain & logistics.

More Reliable Products

- PID Resistant 5BB cells and encapsulants.
- Salt mist & ammonia resistant.
- AR Coated tempered PV grade glass.
- Only positive power tolerance.
- Excellent low light performance.
- Certified to withstand harsh environmental conditions.
- 100% EL Inspected to ensure micro crack free modules.









Applications



projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



Electric Vehicles charging station



Street lighting applications

































TECHNICAL DATA



Mandala Caria		MONOCRYST	ALLINE-PERC	
Module Series	BBS12MC50	BBS12MC60	BBS12MC100	BBS12MC125
Electrical Characteristics at S	TC:			
Maximum Power Pmax (Wp)	50.00	60.00	100.00	125.00
Maximum Voltage Vmpp (V)	20.00	20.00	20.00	20.00
Maximum Current Impp (A)	2.50	3.00	5.00	6.25
Open Circuit Voltage Voc (V)	22.50	22.50	22.50	22.50
Short Circuit Current Isc (A)	2.65	3.18	5.30	6.63
Module Efficiency (%)	17.50	17.80	18.40	18.60

STC:1000W/m2 irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3

Average relative efficiency reduction of <5% for every 200W/m² reduction in Irradiance, according to EN 60904-1

Electrical Characteristics at NOCT:

Maximum Power Pmax (Wp)	36.00	43.30	72.00	90.00
Maximum Voltage Vmpp (V)	17.60	17.60	17.60	17.60
Maximum Current Impp (A)	2.05	2.45	4.09	5.11
Open Circuit Voltage Voc (V)	20.25	20.25	20.25	20.25
Short Circuit Current Isc (A)	2.28	2.73	4.56	5.70

NOCT:800W/m2 irradiance, 20°C ambient temperature, Wind Speed 1m/sec

Temperature coefficient (Tc) and permissible operating conditions

Tc of Open Circuit Voltage (β)	-0.300%/°K
Tc of Short Circuit Current (α)	0.060%/°K
Tc of Power (γ)	-0.370%/°K
NOCT	46 ± 2°C
Maximum series fuse ratings	15A
Temperature Range	-40°C to +85°C
Maximum System Voltage	600/1000 V DC

Mechanical Data

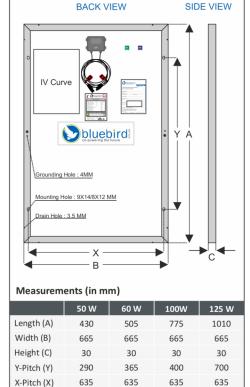
Solar Cells	36 Mono PERC Solar cut cells, 5BB
Junction Box	IP 67 rated with 2 bypass diodes
Superstrate	3.2 mm high transmission low iron tempered glass (AR coated)
Cell Encapsulant	PID Free EVA (Ethylene Vinyl Acetate) - FC/UFC
Backsheet	Composite Film - White (Black & Transparent optional)**
Frame	Silver Anodized Aluminum frame with twin wall profile
Application Class	Class A (safety class II)
Mechanical Load Test	Sustain heavy static load (2400 Pa & 5400 Pa or 550 kg/m2)

^{**}Refer to Bluebird Solar's warranty documents for terms and conditions.

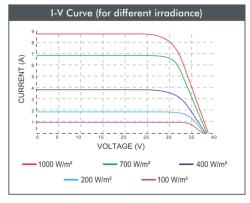
Specification and electrical data included in this datasheet are subject to change without notice. Please confirm your requirements with the company representative while placing your order.

Note: It is mandatory to make negative grounding of modules in all installation to avoid PID Issue

		W	arranty'	Graph	1	
100% 97.5%			DED VALUE	X-axis : Time (years) Y-axis : Warranty (%)		
Warranty				NOM WAR	RRANTY	
1	ı Yea	5 irs ——	10	15	20	25







5.5 Kg

6.8 Kg

8.5 Kg

Weight

4.5 Kg

^{**}Black and transparent backsheet without ICE certification.