

Premium Quality Solar PV Modules



36
Cells

Polycrystalline Solar PV Modules 150-170 W
Mono PERC Solar PV Modules 180-200 W



-  Increased module power output.
-  Maximum system voltage of 1000 V DC.
-  Reduced BOS cost.
-  High area efficiency.
-  Easy installation & handling for various application.

Why Bluebird ?

- ◆ Backed by a 40 year old reputed brand name.
- ◆ Use of Tier-1 raw material.
- ◆ 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.

 **5 MW +**
Installations

 **3 MW +**
Under Execution

 **25 MW +**
Proposal & Design
Consultancy Delivered

 **30 MW +**
PV Module Sales

Applications



On-grid Large scale utility 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

Module Series	POLYCRYSTALLINE			MONOCRYSTALLINE-PERC		
	BBS12F150	BBS12F165	BBS12F170	BBS12MF180	BBS12MF185	BBS12MF 200
Electrical Characteristics at STC:						
Maximum Power Pmax (Wp)	150.00	165.00	170.00	180.00	185.00	200.00
Maximum Voltage Vmpp (V)	17.98	18.18	18.24	20.30	20.34	23.56
Maximum Current Imp (A)	8.32	9.08	9.32	8.87	9.10	8.49
Open Circuit Voltage Voc (V)	21.18	21.38	21.47	23.83	24.08	27.76
Short Circuit Current Isc (A)	8.84	9.62	9.87	9.17	9.64	9.00
Module Efficiency (%)	15.00	15.20	15.40	18.30	18.50	18.70

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)	108.00	121.00	125.00	130.00	133.50	144.43
Maximum Voltage Vmpp (V)	16.20	16.90	17.17	17.42	17.74	20.22
Maximum Current Imp (A)	6.70	7.16	7.28	7.45	7.53	7.14
Open Circuit Voltage Voc (V)	20.20	20.53	20.68	20.89	21.10	24.26
Short Circuit Current Isc (A)	6.90	7.40	7.52	7.83	8.10	7.50

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)	-0.310%/°K	-0.300%/°K
Tc of Short Circuit Current (α)	0.050%/°K	0.060%/°K
Tc of Power (γ)	-0.410%/°K	-0.370%/°K
NOCT	46 ± 2°C	46 ± 2°C
Maximum series fuse ratings	15A	15A
Temperature Range	-40°C to +85°C	-40°C to +85°C
Maximum System Voltage	1000 V DC	1000 V DC

Mechanical Data

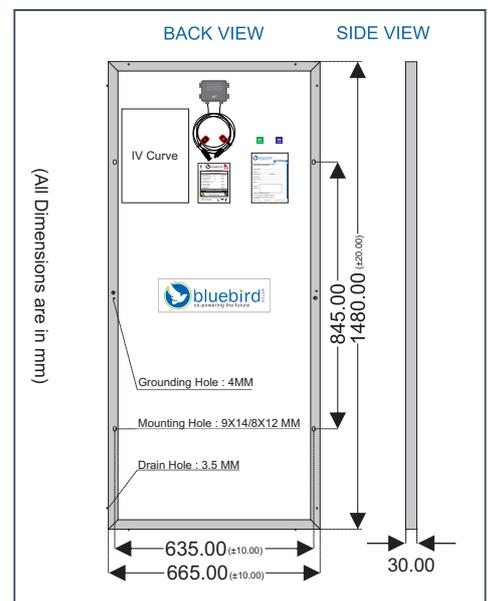
Dimension (LxWxH)	1480mm x 665mm x 30mm (± 10mm)
Solar Cells	Poly 32(8x4) / 36(9x4) Polycrystalline Solar cells, 5BB, (157 x 157mm) Mono 36(9x4) Mono PERC Solar cells, 5BB, (157 x 157mm / 159x159mm)
Weight	11.6 Kg
Junction Box	IP 67 rated with 2 bypass diodes
Superstrate	3.2 mm high transmission low 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/m ²)

**Refer to Bluebird Solar's warranty documents for terms and conditions

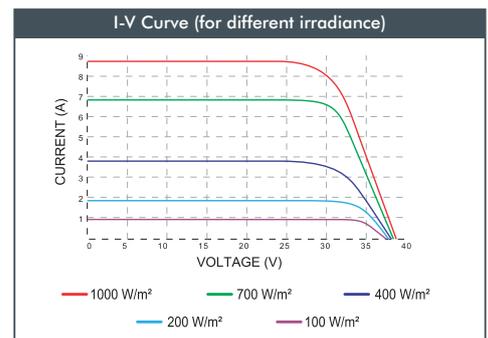
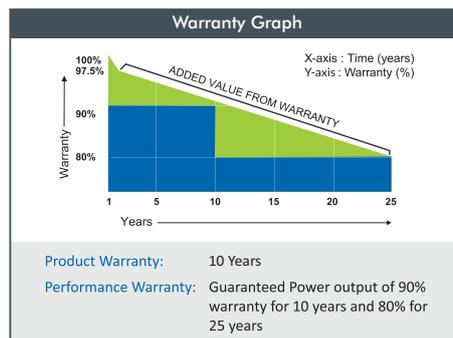
**Black and transparent backsheet without ICE certification

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.



Approvals and certifications	
Products:	IEC 61215 Ed 2, ROHS, IEC 61730, IEC 61701, CE, UL 1703, CEC, CE
Manufacturing:	ISO 9001:2015, ISO 14001: 2015 ISO 45001:2018



CORPORATE OFFICE

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WORKS

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