## Solar PV Modules



Polycrystalline Solar PV Modules 270-280 W







Increased module power output.



Maximum system voltage of 1500 V DC.



Reduced BOS cost.

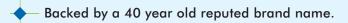


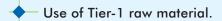
High area efficiency.



Easy installation & handling for various application.

## 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























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Polycrystalline Solar PV Modules 270-280 W



## **TECHNICAL DATA**

Module Series	POLYCRYSTALLINE		
	BBS P 270	BBS P 275	BBS P 280
<b>Electrical Characteristics at STC:</b>			
Maximum Power Pmax (Wp)	270.00	275.00	280.00
Maximum Voltage Vmpp (V)	31.00	31.30	31.60
Maximum Current Impp (A)	8.72	8.80	8.88
Open Circuit Voltage Voc (V)	38.52	38.82	39.12
Short Circuit Current Isc (A)	9.03	9.10	9.18
Module Efficiency (%)	16.63	16.94	17.25

 $STC:1000W/m2\ irradiance,\ 25^{\circ}C\ cell\ temperature,\ AM1.5G\ spectrum\ according\ to\ EN\ 60904-3$  Average relative efficiency reduction of <5% for every  $200W/m^2$  reduction in Irradiance, according to\ EN\ 60904-1

#### **Electrical Characteristics at NOCT:**

Maximum Power Pmax (Wp)	195.90	199.20	203.00
Maximum Voltage Vmpp (V)	28.51	28.71	29.00
Maximum Current Impp (A)	6.87	6.94	7.10
Open Circuit Voltage Voc (V)	35.17	35.48	35.71
Short Circuit Current Isc (A)	7.16	7.21	7.29

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

### Temperature coefficient (Tc) and permissible operating conditions

-0.310%/°K
0.050%/°K
-0.410%/°K
46 ± 2°C
20A
-40°C to +85°C
1000/1500 V DC

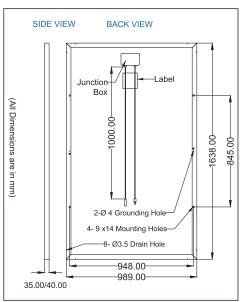
### **Mechanical Data**

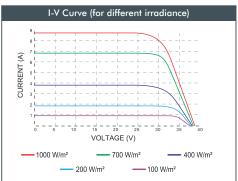
Dimension (LxWxH)	1638mm x 989mm x 35/40mm (± 1.5mm)
Solar Cells (PID Free)	60(10x6) Polycrystalline Solar cells, 5BB, (156.75 x 156.75mm - 6 inch)
Weight	18.5 Kg
Junction Box	IP 67 rated with 3 bypass diodes
Cables & Connectors	4 sq. m solar cable 1000mm, 2 Nos. black MC4 connectors
Superstrate	3.2 mm high transmission low iron tempered glass (AR coated/Non 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)

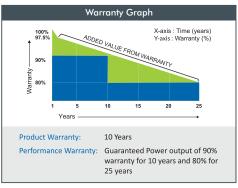
<sup>\*\*</sup>Refer to Bluebird Solar's warranty documents for terms and conditions

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.







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	

Packaging Information				
Container	20'GP	40'GP		
Pallets/Container	10	24		
Pieces/Container	360	840		

<sup>\*\*</sup>Black and transparent backsheet without ICE certification