

**For a Free Quote:**

Web: **EnergyPal.com/solar**

Call: **1-800-990-3725**

Email: **contact@energypal.com**

# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Bluebird Solar Pvt. Ltd.**

**BBS M 350 -360**

**BBS M360**

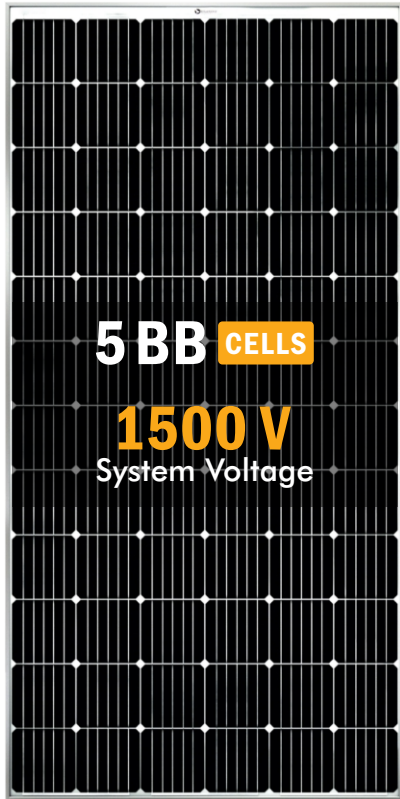
Also available on the web at  
[EnergyPal.com/bluebird-solar-pvt-ltd-solar-panels/bbs-m360](http://EnergyPal.com/bluebird-solar-pvt-ltd-solar-panels/bbs-m360)

# Premium Quality Solar PV Modules



**72**  
Cells

Monocrystalline Solar PV Modules 350-360 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 ?

- ◆ 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



# Premium Quality Solar PV Modules



**bluebird** SOLAR  
co-powering the future

**72**  
Cells

Monocrystalline Solar PV Modules 350-360 W

## TECHNICAL DATA

Module Series	MONOCRYSTALLINE		
	BBS M 350	BBS M 355	BBS M 360
<b>Electrical Characteristics at STC:</b>			
Maximum Power P <sub>max</sub> (Wp)	350.00	355.00	360
Maximum Voltage V <sub>mpp</sub> (V)	38.90	39.23	39.57
Maximum Current I <sub>mpp</sub> (A)	9.00	9.05	9.10
Open Circuit Voltage V <sub>oc</sub> (V)	47.40	47.90	48.40
Short Circuit Current I <sub>sc</sub> (A)	9.65	9.75	9.85
Module Efficiency (%)	18.20	18.40	18.60

STC: 1000W/m<sup>2</sup> irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3  
Average relative efficiency reduction of <5% for every 200W/m<sup>2</sup> reduction in Irradiance, according to EN 60904-1

### Electrical Characteristics at NOCT:

Maximum Power P <sub>max</sub> (Wp)	260.10	263.75	267.42
Maximum Voltage V <sub>mpp</sub> (V)	35.62	35.81	35.99
Maximum Current I <sub>mpp</sub> (A)	7.30	7.37	7.43
Open Circuit Voltage V <sub>oc</sub> (V)	44.08	44.27	44.45
Short Circuit Current I <sub>sc</sub> (A)	7.68	7.74	7.81

NOCT: 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, Wind Speed 1m/sec

### Temperature coefficient (T<sub>c</sub>) and permissible operating conditions

T <sub>c</sub> of Open Circuit Voltage (β)	-0.340%/°K
T <sub>c</sub> of Short Circuit Current (α)	0.070%/°K
T <sub>c</sub> of Power (γ)	-0.460%/°K
NOCT	46 ± 2°C
Maximum series fuse ratings	20A
Temperature Range	-40°C to +85°C
Maximum System Voltage	1000/1500 V DC

### Mechanical Data

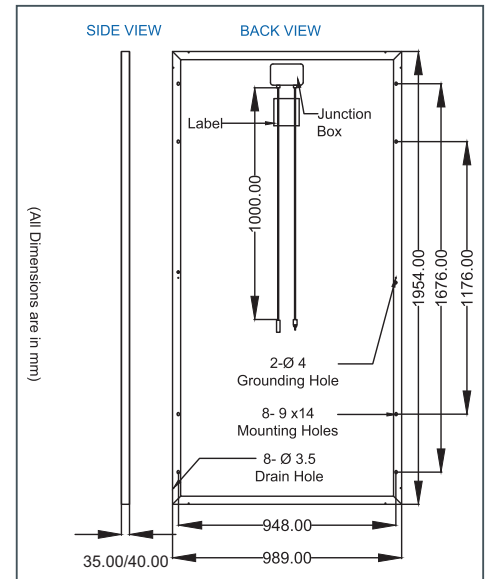
Dimension (LxWxH)	1954mm x 989mm x 35/40mm (± 1.5mm)
Solar Cells (PID Free)	72(12x6) Monocrystalline Solar cells, 5BB, (156.75 x 156.75mm - 6 inch)
Weight	20.5 Kg
Junction Box	IP 67 rated with 3 bypass diodes
Cables & Connectors	4 sq. m solar cable 1000mm, 2 Nos. black MC4 connectors
Superstrate	3.2 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/m <sup>2</sup> )

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

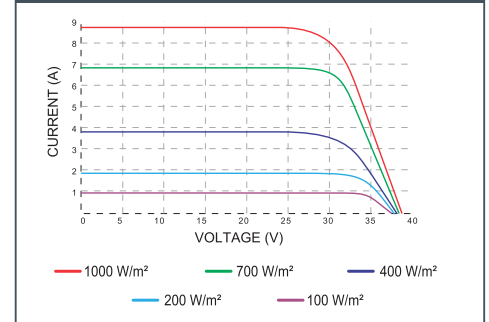
\*\*Black and transparent backsheet without ICE certification

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.

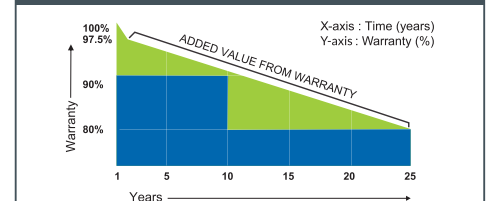
Note: It is mandatory to make negative grounding of modules in all installation to avoid PID Issue.



I-V Curve (for different irradiance)



Warranty Graph



Product Warranty: 10 Years

Performance Warranty: Guaranteed Power output of 90% warranty for 10 years and 80% for 25 years

### 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	300	720

### CORPORATE OFFICE

70, Rajasthani Udyog Nagar Industrial Area, G.T. Karnal Road,  
(Opposite Jahangirpuri Metro Station) Delhi-110033

### WORKS

Plot No.5, Ecotech, Udyog Vihar, Greater Noida,  
Uttar Pradesh-201306