

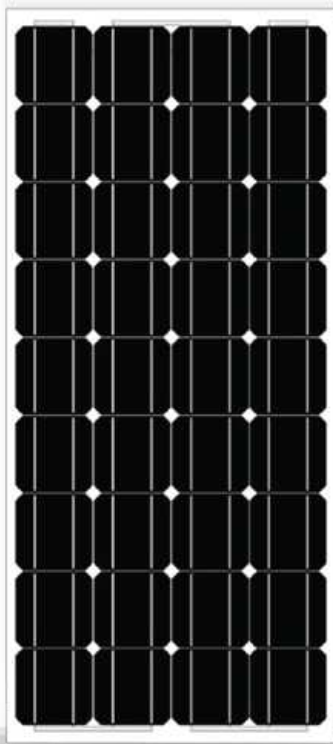
⚡ 160-180 Watt

●●● 36 Cells Series

☒ Mono Crystalline Solar PV Module



bluebird SOLAR
co-powering the future



Salient Features:



High conversion efficiency.



Outstanding low Light and longer wavelength performance.



Only positive power output tolerance.



Resistant to PID, Salt-Mist & Ammonia corrosion.

High Power PERC Modules:

- Designed with new generation PERC Technology.
- Higher cell Efficiency than conventional Polycrystalline & Monocrystalline PV modules.
- More power output per sq. meter area.
- Lower temperature Co-efficient.

Quality & Safety



Certified for Salt Mist Corrosion Resistance



100% EL Inspected to ensure micro crack free modules.



Certified to withstand harsh environmental conditions.



25 Yrs. of Linear output power.



PID resistant cells & encapsulants.

Applications



Street lighting applications and portable solar products



Telecommunication towers applications



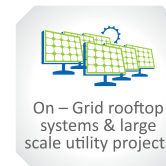
Electric vehicles charging station



Defense and Offshore applications



Solar water pumping systems



On – Grid rooftop systems & large scale utility projects



Off – Grid rooftop systems for residential buildings



RoHS



ISO 9001: 2015



ISO 14001: 2015



CORPORATE OFFICE

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

WORKS

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Udyog Vihar, Greater Noida,
Uttar Pradesh - 201306

☎ 011-47052208/09

🌐 www.bluebirdsolar.in

✉ info@bluebirdsolar.in

TECHNICAL DATA



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| Series | Type | Power |
|--|------------------|--------------|
| SUNBLAZE PRIME 36 M XXX (XXX = 160 TO 170) | BBS M 160- M 170 | 160~170 Watt |
| SUNBLAZE PRIME+ 36 M XXX (XXX = 175 TO 180) | BBS M 175- M 180 | 175~180 Watt |

| Module Series | SUNBLAZE PRIME | | | SUNBLAZE PRIME + | |
|---------------|----------------|-----------|-----------|------------------|-----------|
| | BBS M 160 | BBS M 165 | BBS M 170 | BBS M 175 | BBS M 180 |

Electrical Characteristics at STC:

| Parameter | 160 | 165 | 170 | 175 | 180 |
|------------------------------|------|------|------|------|------|
| Maximum Power Pmax (Wp) | 160 | 165 | 170 | 175 | 180 |
| Maximum Voltage Vmpp (V) | 18.6 | 18.9 | 19.1 | 19.2 | 19.7 |
| Maximum Current Imp(A) | 8.6 | 8.8 | 8.9 | 9.0 | 9.1 |
| Open Circuit Voltage Voc (V) | 22.2 | 22.5 | 22.7 | 23.0 | 23.3 |
| Short Circuit Current Isc(A) | 9.2 | 9.3 | 9.4 | 9.6 | 9.7 |
| Module Efficiency(%) | 16.2 | 16.6 | 17.3 | 17.7 | 18.2 |

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:

| Parameter | 117 | 121 | 125 | 129 | 131 |
|------------------------------|-------|-------|-------|-------|-------|
| Maximum Power Pmax (Wp) | 117 | 121 | 125 | 129 | 131 |
| Maximum Voltage Vmpp (V) | 16.75 | 16.90 | 17.17 | 17.36 | 17.46 |
| Maximum Current Imp(A) | 6.96 | 7.16 | 7.27 | 7.41 | 7.51 |
| Open Circuit Voltage Voc (V) | 20.41 | 20.53 | 20.67 | 20.78 | 20.89 |
| Short Circuit Current Isc(A) | 7.14 | 7.23 | 7.35 | 7.45 | 7.54 |

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) | -0.34%/°C ± 0.02 |
| Tc of Short circuit Current (α) | 0.07%/°C ± 0.01 |
| Tc of Power (γ) | -0.46%/°C ± 0.02 |
| NOCT | 45 ± 2°C |
| Maximum series fuse ratings | 15A |
| Temperature Range | -40°C to + 85°C |
| Maximum System Voltage | 1000 V DC |
| Limiting Reverse Current (Ir) | 9.0 A |

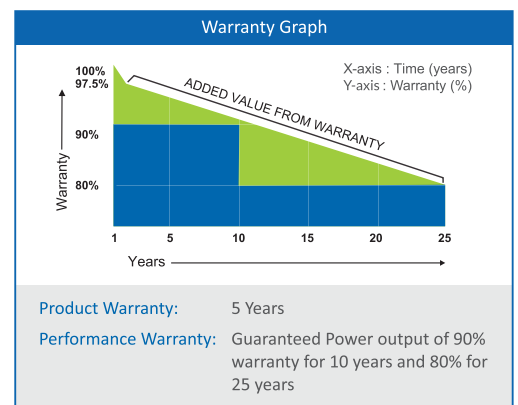
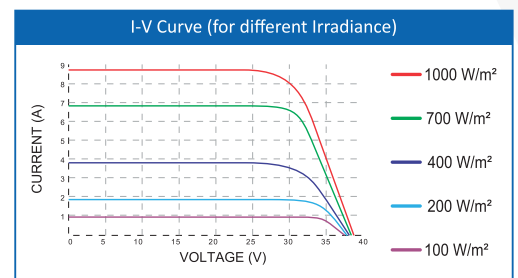
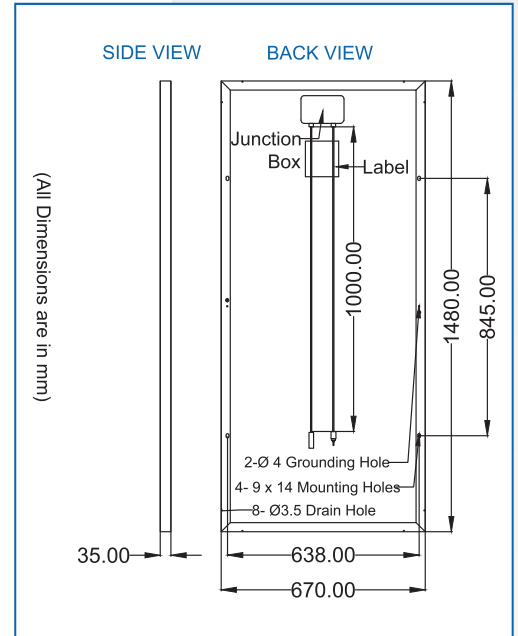
Mechanical Data

| | |
|-------------------------------|---|
| Dimension (L x W x H) (in mm) | 1480mm x 670mm x 35mm (± 1.5mm) |
| Solar Cells | Sunblaze: 36 (9x4) Monocrystalline solar cells ,4BB, (156.75x156.75mm – 6inch) |
| | Sunblaze Prime: 36 (9x4) Monocrystalline PERC solar cells, 4BB, (156.75x156.75mm – 6inch) |
| Weight | 11.6 Kg |
| Junction Box | IP 67 rated with 2 bypass diodes |
| Superstrate (Glass) | 3.2 mm high transmission low iron tempered (AR coated) |
| Cell encapsulant | EVA (Ethylene Vinyl Acetate) – FC/UFC |
| Back Sheet | Composite Film – White (Black & Transparent optional)** |
| Frame | Silver Anodized Aluminum Frame with twin wall profile (Black Optional)** |
| Application class | Class A (safety class II) |
| Mechanical Load Test | Sustain heavy wind & snow loads (2400 Pa & 5400 Pa or 550 Kg/m ²) |
| | Maximum diameter of 24 mm with hail impact of 83 km/h |

Packaging Information

| | | |
|-------------------|-------|-------|
| Container | 20'GP | 40'GP |
| Pallets/Container | 12 | 28 |
| Pieces/Container | 600 | 1200 |

**Refer to Bluebird Solar's warranty documents for terms and conditions
**Black and transparent backsheets and black frame module without IEC certification



| Approvals and certificates | |
|----------------------------|---|
| Products: | IEC 61215 Ed 2, ROHS, IEC 61730, IEC 61701, CE, UL 1703, CEC, CE, |
| Manufacturing: | ISO 9001:2015, ISO 14001: 2015 |

Specifications 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.