

TECHNICAL DATA



| Series | Type | Power |
|------------------------------|------------------|--------------|
| 36 P XXX (XXX = 150 TO 160) | BBS P 150- P 160 | 150~160 Watt |
| 36 P XXX (XXX = 165 TO 170) | BBS P 165- P 170 | 165~170 Watt |

| Module Series | BBS P 150 | BBS P 155 | BBS P 160 | BBS P 165 | BBS P 170 |
|---------------|-----------|-----------|-----------|-----------|-----------|
|---------------|-----------|-----------|-----------|-----------|-----------|

Electrical Characteristics at STC:

| | BBS P 150 | BBS P 155 | BBS P 160 | BBS P 165 | BBS P 170 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Maximum Power Pmax (Wp) | 150 | 155 | 160 | 165 | 170 |
| Maximum Voltage Vmpp (V) | 18.3 | 18.7 | 19.0 | 19.2 | 19.4 |
| Maximum Current Imp(A) | 8.21 | 8.29 | 8.42 | 8.60 | 8.73 |
| Open Circuit Voltage Voc (V) | 22.0 | 22.3 | 22.6 | 23.1 | 23.3 |
| Short Circuit Current Isc(A) | 8.79 | 8.84 | 8.91 | 9.12 | 9.23 |
| Module Efficiency(%) | 15.2 | 15.7 | 16.2 | 16.7 | 17.2 |

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:

| | BBS P 150 | BBS P 155 | BBS P 160 | BBS P 165 | BBS P 170 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Maximum Power Pmax (Wp) | 109 | 113 | 117 | 121 | 125 |
| Maximum Voltage Vmpp (V) | 16.30 | 16.53 | 16.75 | 16.90 | 17.17 |
| Maximum Current Imp(A) | 6.70 | 6.81 | 6.96 | 7.16 | 7.27 |
| Open Circuit Voltage Voc (V) | 20.10 | 20.30 | 20.41 | 20.53 | 20.67 |
| Short Circuit Current Isc(A) | 7.04 | 7.15 | 7.29 | 7.40 | 7.52 |

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

Temperature coefficient (Tc) and permissible operating conditions

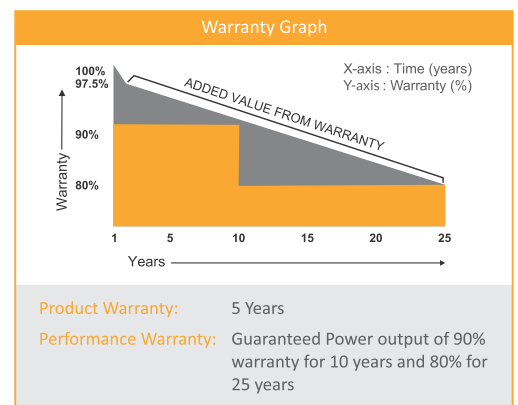
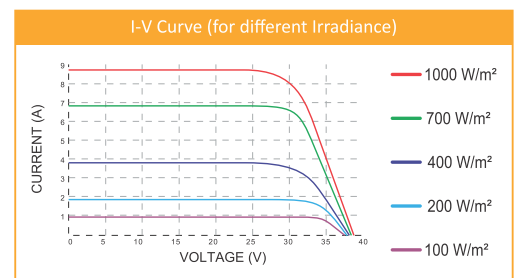
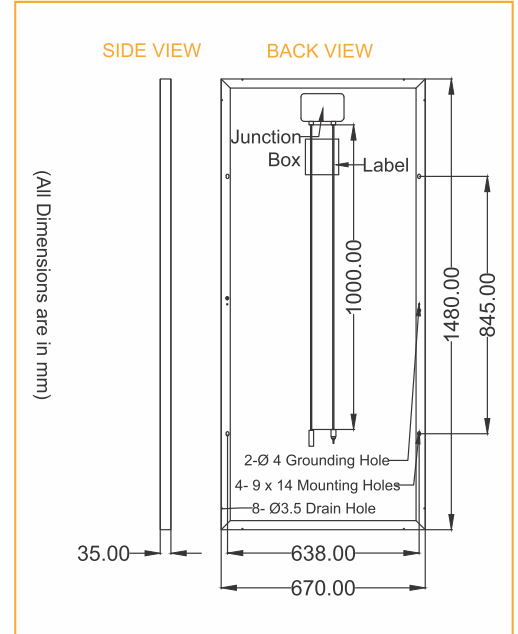
| | |
|---------------------------------|------------------|
| Tc of Open Circuit Voltage (β) | -0.31%/°C ± 0.02 |
| Tc of Short circuit Current (α) | 0.057%/°C ± 0.01 |
| Tc of Power (γ) | -0.41%/°C ± 0.02 |
| NOCT | 45 ± 2°C |
| Maximum series fuse ratings | 15A |
| Temperature Range | -40°C to + 85°C |
| 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 | 36 (9x4) Polycrystalline solar cells ,4BB, (156.75x156.75mm – 6inch) |
| | 36 (9x4) Polycrystalline 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/m²) 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 |



| 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 |