

500Wp Mono-Facial PV Module

10BB | M10 Half-Cut Solar Cells







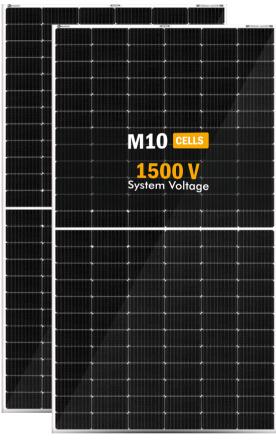
Rated Split Half Cut Cells Junction box



Upto 20.25% Module Efficiency



+ 5wp +VE Power Tolerance





Superior module efficiency and better field reliablity



Cylindrical tabbing wires to reduce the shadow on cell active area.



M10 sized solar cell for lower LCOE & Better ROI.



MBB technology for reduced internal cell resistance & increased power output.



Excellent anti-micro cracking performance and increased tolerance to hotspots



Better Temperature coefficients giving higher power generation under higher ambient temperature conditions



Certified to withstand Heavy snow load up to 5400 Pa & wind load up to 2400 Pa*

Also Available with DCR content

Why Bluebird?

- Part of a 40+ years old reputed brand
- Widest range of PV modules
- Intensive R&D and 34 In house QCs
- Best in class BOM sourced from top suppliers
- First In industry 30 years warranty
- Robust supply chain & logistics
- Pre and post lamination EL testing

More Reliable Products

- 2X EL Tested for 0% Micro-cracks
- PID Resistant M10 cells & encapsulants.
- AR Coated tempered PV grade glass.
- Excellent low light performance.
- Salt mist & ammonia resistant.



On Grid Large Scale Utility



Commercial Rooftop Systems



Rooftop Systems



Pumps (PM KUSUM)





























TECHNICAL DATA



| Module Series | BBS24MC500 | | | |
|----------------------------------|------------|--|--|--|
| ELECTRICAL CHARACTERISTICS (STC) | | | | |
| Maximum Power Pmax (Wp) | 500 | | | |
| Maximum Voltage Vmpp (V) | 38.38 | | | |
| Maximum Current Impp (A) | 13.03 | | | |
| Open Circuit Voltage Voc (V) | 45.4 | | | |
| Short Circuit Current Isc (A) | 13.9 | | | |
| Module Efficiency (%) | 20.25 | | | |
| Fill Factor % | 79.25 | | | |

^{*}STC Irradiance 1000W/m2, Module Temperature 25°C and AM 1.5 *No Negative ower Tolerance in Nominal Power

ELECTRICAL CHARACTERISTICS (NOCT)

| Maximum Power Pmax (Wp) | 374.00 | |
|-------------------------------|--------|--|
| Maximum Voltage Vmpp (V) | 35.68 | |
| Maximum Current Impp (A) | 10.49 | |
| Open Circuit Voltage Voc (V) | 42.45 | |
| Short Circuit Current Isc (A) | 11.20 | |

^{*}NOCT-Irradiance 800 W/m2, AM 1.5, Ambient Temperature 20°C and Wind Speed 1m/s

Temperature coefficient (Tc) and permissible operating condiitions

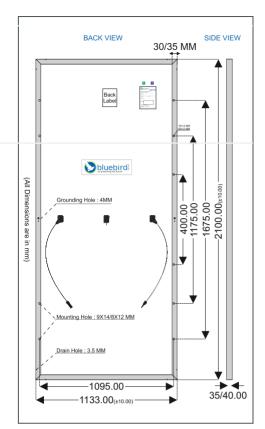
| Tc of Open Circuit Voltage (β) | -0.27%/°C |
|--|----------------|
| Tc of Short Circuit Current (α) | 0.050%/°C |
| Tc of Power (y) | -0.35%/°C |
| NOCT | 45 ± 2°C |
| Maximum series fuse ratings | 25A |
| Temperature Range | -40°C to +85°C |
| Maximum System Voltage | 1500 V DC |
| | |

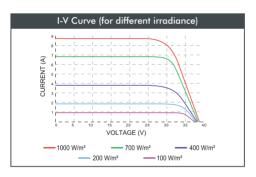
Mechanical Data

| Dimension (LxWxH) | 2100mm x 1133mm x 35mm | | |
|------------------------|--|--|--|
| Weight | 27 Kg | | |
| Solar Cells (PID Free) | 132 (11 x 6 x 2), Mono Cut Cells, 10BB, (91 X182mm) | | |
| Junction Box | IP68, Split Junction Box with individual bypass diodes | | |
| Cables & Connectors | 400 mm (+ve) and 400 mm (-ve) lenght cables, MC4 Compatble or MC4 Connectors | | |
| 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) | | |
| Packaging | Standard 30 Modules per Pallet | | |

| Approvals and certifications | | |
|------------------------------|---|--|
| Products:* | ALMM, BIS, IEC 61215/IS 14286, IEC 61730-I & II, IEC 61701, IEC 61853, IEC 62804, IEC 62716 | |
| Manufacturing: | ISO 9001:2015, ISO 14001: 2015 ISO 45001:2018 | |

^{*}some certificationse under process







| Packaging Information | | | | |
|-----------------------|--------------|---------------|------------------------------|--|
| Truck Type | Pallet/Truck | Modules/Truck | KW/Truck _(Approx) | |
| 19 ft. | 10 | 300 | 150 | |
| 22 ft. | 12 | 360 | 180 | |
| 32 ft. | 18 | 540 | 270 | |
| 40 ft. | 22 | 660 | 330 | |
| Container Type | Pallet/Truck | Module/Truck | KW/Truck _(Approx) | |
| 40 HQ | 22 | 660 | 330 | |

Above quantities e subject to v variation dependir Trucks under consideration ae all open body trucks. Customized packaging available.

^{*}No Negative ower Tolerance in Nominal Power

^{**}Refer to Bluebird Solar's warranty documents for terms and conditions.

Specification and electrical daa included in this datasheet arre subject to change without notice. Please confirmour requirements with the company representative while placing our order.

Note: It is mandatory to make negative gounding of modules in all insttallation tovoid PID Issue.