



Orb Energy's new Mono PERC 72 cell, 9 Busbar (BB) panels work as hard as you.

Built to maximise generation, reduce power losses



With only positive tolerance, panels deliver higher than rated wattage



PID resistance protects from leakages and ensures longer life and reliable power generation, backed by 25 year warranty



PERC technology delivers high efficiency > 20%

Backed by best-in-class technology



Manufacturing facility vetted by PI Berlin for USA's DFC *



Orb Energy uses advanced German technology for stringing and lamination



Electroluminescence tested to ensure micro-crack free panels



* DFC: U.S. International Development Finance Corporation

Y O U ' V E G O T T H E P O W E R



Mono PERC Modules - 72 cells - 9BB

Electrical Specifications

Rated Power (STC) *	435	440	445
Module Efficiency	20.06%	20.29%	20.52%
Open Circuit Voltage - Voc (Volts)	49.90	50.00	50.10
Short Circuit Current - Isc (Amps)	11.34	11.36	11.38
Max Power Voltage - Vmp (Volts)	41.64	41.91	42.19
Max Power Current - Imp (Amps)	10.45	10.50	10.55

* Tolerance of 0 ~ +4

Temperature Co-efficient

Open-Circuit Voltage	-0.2588% / °C
Short-Circuit Current	0.0488% / °C
Rated Power	-0.3393% / °C
NOCT (Normal Operating Temperature)	46°±2°C

Mechanical Data

Number of Cells and Dimensions	72 Cells - 166 (6.5in) x 166 (6.5in)
Dimensions in mm: LxW x H	2075mm (81.6in) x 1045mm (41.1in) x 35mm (1.4in)
Mounting Dimensions in mm: LxW	1200mm (47.2in) x 1009mm (39.7in)
Weight	23.5 Kg (51.80 Lbs)
Front Glass	3.2mm (0.1in) thick, toughened anti-reflective coated glass, high transmission
Encapsulant	Ethylene Vinyl Acetate (EVA)
Back Sheet	White / Black-cell side (optional)
Frame	Anodized Aluminum Alloy Silver / Black (optional)
Junction Box	IP 67
Number of Bypass Diodes	3 Diodes
Cables	4 Sq. mm (0.2in), 1.2 Meter (47.2in) Length Cable
Connectors	MC4 Compatible

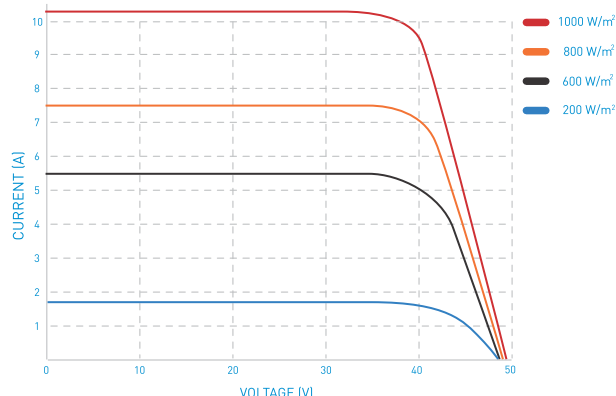
Permissible Operating Conditions

Operating Temperature Range	-40° C to 85° C
Max. System Voltage	1500V
Max. Series Fuse Rating	15A
Limiting Reverse Current	15A
Maximum Wind Load	2400 Pa
Maximum Snow Load	5400 Pa
Resistance Against Hail	Maximum 25mm (1.0in) Dia with Impact speed of 83 km/h
Application Class	Class A (Safety Class II)

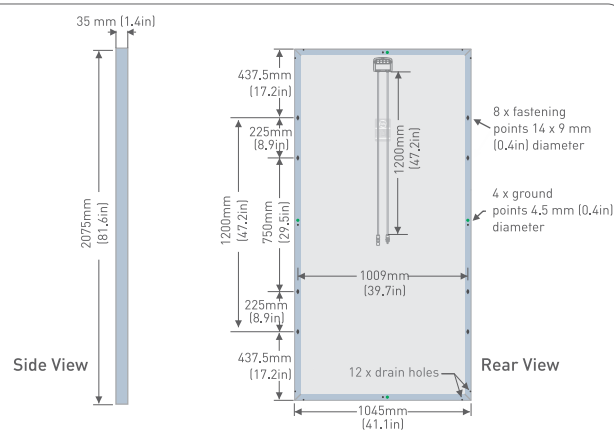
Warranty and Certificates

Product Warranty	10 years
Linear Power Warranty	Not less than 80% of the minimum peak power by end of 25th year
Certificates	IEC 61215, IEC 61730

Note: 1) Rated power data at standard test conditions (STC), E = 1000 W/m², TC = 25° C, AM = 1.5
2) Specifications are subject to change without notice.



Typical IV Curves



Module Dimension Drawing

Packaging Information

No. of panels per pallet	28 nos
No. of pallets per container (40'HC)	22 nos
Total no. of panels per container (40'HC)	616 nos



Orb's State of the Art PV Plant in Bangalore

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