330 WATT MONO PERC SPLIT CELL



POWERWAVE





WARRANTY

PKC

Twin Power - A Module Re-Modeled

Powerwaves Twin Power Series solar module boasts two identical parts, which are composed of cells that are half the size of ordinary solar cells. By cutting cells into halves, these smaller currents will help reduce "Cell To Module" loss, which means higher output.

In the meantime, the overall space between cells are doubled, and more light will be transferred into power through multiple reflections. Compared to mainstream standard modules, the Twin Power series module has lower current and series resistance which helps minimize mismatch loss, internal power loss, and shadow effect. One cell has EL defect or appearance defect, such as black edge or V sharp. After cutting, one intact half can be reused.

Less Missmatched Loss

Instead of 6 internal strings of cells, the Twin Power series module has 2 x 6 shorter ones. This design effectively deals with the mismatch that happens between cells caused by shading and out of sync performance degradation.



Less Internal Power Loss



The ribbon length of half-cell is shorter than normal cell. Calculated by Joule's law and Ohm' law, the power loss reduction is nearly 6%

Higher Yield Due to Better Shading Response

The Twin Power series comprises two separated and identical solar cell arrays, which means the ordinary strings of cells are cut into halves, and these shorter strings compose arrays which has separated current paths. When a module is shaded, only one side shaded array's current will be impacted, while the other array will still be functionally producing power. Under this circumstance, when a module is shaded, the affected working areas of the Twin Power panel will be 50% less.

By cutting solar cell into halves, the internal power loss will be lower and hot spot effect will also be reduced.





PW-XXX-BMB: Maximum System Voltage1000 VDC

Electrical Characteristics

Module Type	PW-330-BMB
	STC
Maximum Power at STC (Pmp)	330
Open Circuit Voltage (Voc)	40.8
Short Circuit Current (Isc)	10.11
Maximum Power Voltage (Vmp)	34.4
Maximum Power Current (Imp)	9.60
Module Efficiency at STC(ηm)	19.49
Power Tolerance	(0,+4.99)
Maximum System Voltage	1000 VDC
Maximum Series Fuse Rating	20A

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5;

Temperature Characteristics

Pmax Temperature Coefficient	-0.38 %/°C	
Voc Temperature Coefficient	-0.28 %/°C	
Isc Temperature Coefficient	+0.05 %/°C	
Operating Temperature	-40∼+85 °C	
Nominal Operating Cell Temperature (NOCT)	45±2 °C	

Mechanical Specifications

External Dimensions	1690 x 1002 x 35 mm		
Weight	19.0kg		
Solar Cells	PERC Mono crystalline158.75 × 79.375 mm(120pcs)		
Front Glass	3.2 mm AR coating tempered glass, low iron		
Frame	Anodized aluminium alloy		
Junction Box	IP68, 3 diodes		
Output Cable	4.0 mm²,Portrait:255mm(+)/355mm(-);Landscape:1200mm		
Connector	MC4 Compatible		
Mechanical Load	5400 Pa		

Packing Configuration

	1690 x 1002 x 35 mm			
Container	20'GP	40'GP	40'HQ	
Pieces per Pallet	30	30	30+2*	
Pallets per Container	12	26	26	
Pieces per Container	360	780	832	

* 30+2 pieces per pallet is the special package which only suits for container transport. For details,please consult POWERWAVE.





I-V Curve (PW-330-BMB)



Your panel is only as good as the local company standing behind it.



Why Powerwave?

Powerwave is an Australian, privately owned, independent solar brand backed by Australia's largest Online Electrical Wholesaler, Tradezone.

- Australian Owned & Operated
- Over 28 Years in Business
- Reliable & Trustworthy

Tradezone and Powerwave are part of the Kingston Group of Companies. Based on the Gold Coast, the group has been trading for over 25 years and has more than 100 staff as well as an extensive property portfolio. This gives you the peace of mind that local teams and resources are standing by for the full duration of the product's life. Why risk buying a long term asset from a brand that you can't physically speak to or even visit their office in the off chance you need to.



