

## TECHNICAL SPECIFICATIONS - WAAREE PV MODULES

Electrical Characteristics *	WS-210	WS-220	WS-230
Power (Pm) in Watts (nominal)	210	220	230
Open Circuit Voltage (Voc) in Volts	36	36	36
Short Circuit Current (Isc) in Amps	7.78	8.14	8.50
Voltage at Maximum Power (Vmp) in Volts	29	29	29
Current at Maximum Power (Imp) in Amps	7.25	7.60	7.94
Maximum System Voltage	1000V		
Physical Parameters (Refer drawing below)			
Solar Cells per Module (Units)	60		
Length x Width x Thickness (L x W x T) mm	1660 x 990 x 42		
Weight - Kg	20		
Mounting Holes Pitch (Y) - mm	1000		
Mounting Holes Pitch (X) - mm	945		
Cables with Connectors	4mm <sup>2</sup> , TÜV certified, 1000mm each		
Junction Box	IP65 / 4T with 3 diodes		
Certifications: IEC 61215 / IEC 61730 -1 / IEC 61730 - 2 / TUV Safety Class II			

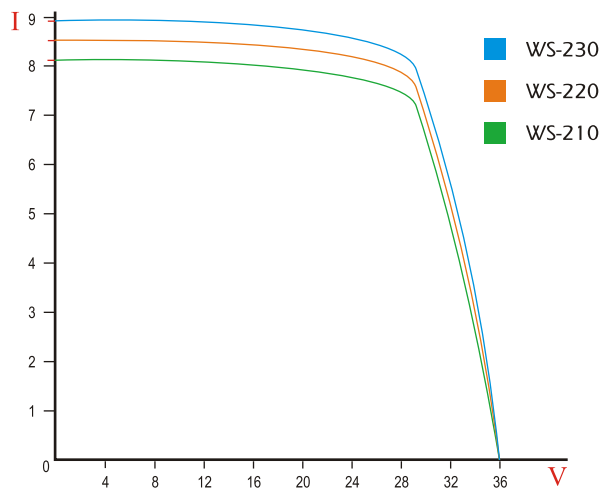


\*Measurement Tolerance on Power +/- 5%. All electrical parameters specified at STC : 25°C cell temperature; 100mW/cm<sup>2</sup> irradiance; AM 1.5

### Other Characteristics

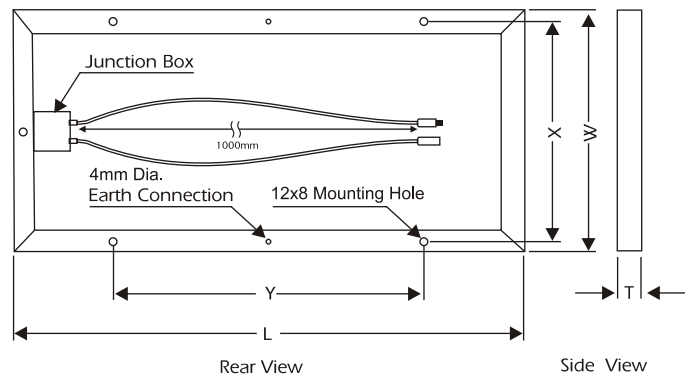
Type of Cell : Mono / Multi Crystalline Silicon  
 Front Face : Tempered Glass (Low Iron)  
 Encapsulate : Ethylene Vinyl Acetate  
 Frame : Anodized Aluminium  
 Junction Box : Weather Proof Nylon 6  
 Temp. Coefficients : Voltage -0.123 V / °K  
 Current +4.4 mA / °K  
 Power -0.47% / °K  
 NOCT : 47+/-2 °C

- All modules of 180Wp and above are supplied with pre-fixed cables and connectors.
- All modules are supplied with screwless Hollow section frames.
- Warranty : Up to 25 Years Limited Extended Warranty
- Due to constant product modifications, WAAREE reserves the right to amend the above specifications without prior notice.



### Mounting Details

All dimensions in mm and tolerances ±2mm



WEPL/WS-230/Rev-4/Jul.09



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