

## TECHNICAL SPECIFICATIONS - WAAREE PV MODULES

| Electrical Characteristics *                                                   | WS-175                                        | WS-180 | WS-190 | WS-200 |
|--------------------------------------------------------------------------------|-----------------------------------------------|--------|--------|--------|
| Power (Pm) in Watts (nominal)                                                  | 175                                           | 180    | 190    | 200    |
| Open Circuit Voltage (Voc) in Volts                                            | 32                                            | 32     | 32     | 32     |
| Short Circuit Current (Isc) in Amps                                            | 7.6                                           | 7.8    | 8.3    | 8.7    |
| Voltage at Maximum Power (Vmp) in Volts                                        | 26                                            | 26     | 26     | 26     |
| Current at Maximum Power (Imp) in Amps                                         | 6.7                                           | 6.9    | 7.3    | 7.7    |
| Maximum System Voltage                                                         | 1000V                                         |        |        |        |
| Physical Parameters (Refer drawing below)                                      |                                               |        |        |        |
| Solar Cells per Module (Units)                                                 | 54                                            |        |        |        |
| Length x Width x Thickness (L x W x T) mm                                      | 1490 x 990 x 42                               |        |        |        |
| Weight - Kg                                                                    | 17.5                                          |        |        |        |
| Mounting Holes Pitch (Y) - mm                                                  | 900                                           |        |        |        |
| Mounting Holes Pitch (X) - mm                                                  | 949                                           |        |        |        |
| 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 |                                               |        |        |        |

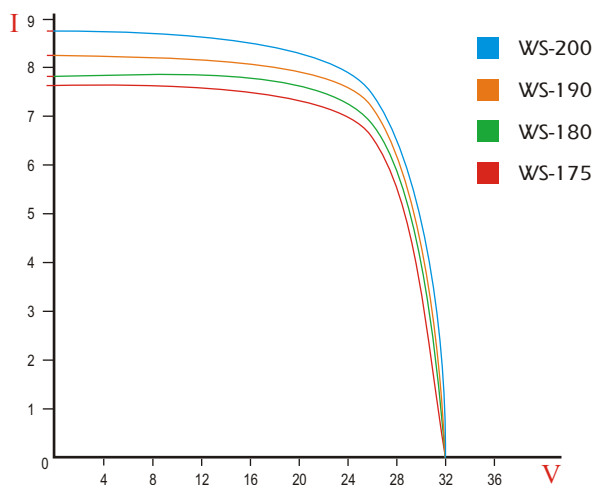


\*Measurement Tolerance on Power +/- 5%. All electrical parameters specified at STC : 25°C cell temperature; 100mW/cm<sup>2</sup> irradiance; AM 1.5

### Other Characteristics

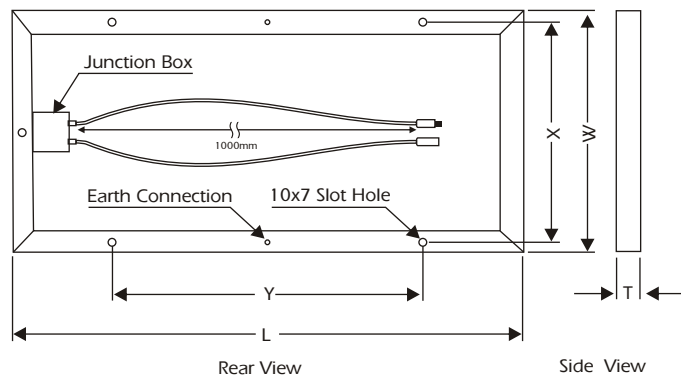
Type of Cell : Mono / Multi Crystalline Silicon  
 Front Face : Tempered Glass (Low Iron)  
 Encapsulate : Ethylene Vinyl Acetate  
 Frame : Anodized Aluminium  
 Junction Box : Weather Proof Nylon 6  
 Temp. Coefficients : Voltage -0.123 V / °K  
 Current +4.4 mA / °K  
 Power -0.47% / °K  
 NOCT :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

- Due to constant product modifications, WAAREE reserves the right to amend the above specifications without prior notice.
- All modules of 180Wp and above are supplied with pre-fixed cables and connectors.
- All modules of 120Wp and above are supplied with screwless Hollow section frames.
- Warranty : Up to 25 Years Limited Extended Warranty



### Mounting Details

All dimensions in mm and tolerances ±2mm



WEPL/WS-200/Rev-2/Jan.09



**WAAREE Energies Pvt. Ltd.**

H.O. : Mumbai, India    Factory : Surat, India  
 Tel.: +91-22-66963030    Fax : +91-22-26873613    Email : infosolar@waaree.com

Sun Power Forever™