

## Features

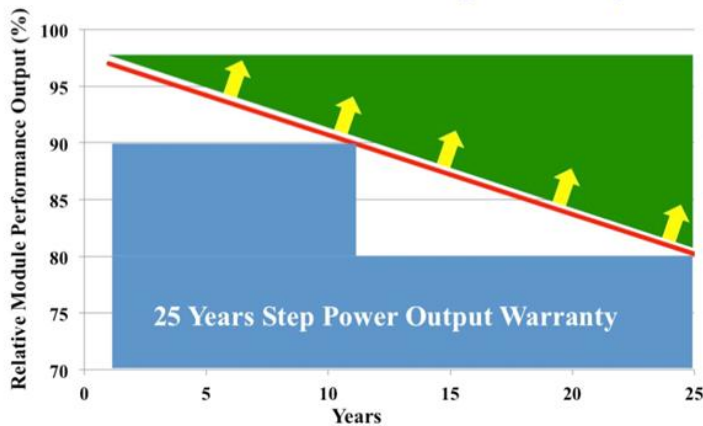


- ※ Excellent module efficiency up to 16.50% by using high efficient polycrystalline solar cells 156x156mm
- ※ Outstanding performance at low irradiance above 96.3%
- ※ Heavy snow load up to 5400 Pa and wind load up to 3800Pa
- ※ IP65 or 67 junction box is available for long term weather endurance
- ※ Salt mist, ammonia and blowing sand resistance, apply to seaside, farm and desert areas
- ※ Positive power tolerance up to 5w
- ※ Selective materials and rigid process effectively control Potential Induced Degradation (PID)
- ※ Total quality control and complete traceability of Material by Shop Floor Control (SFC)

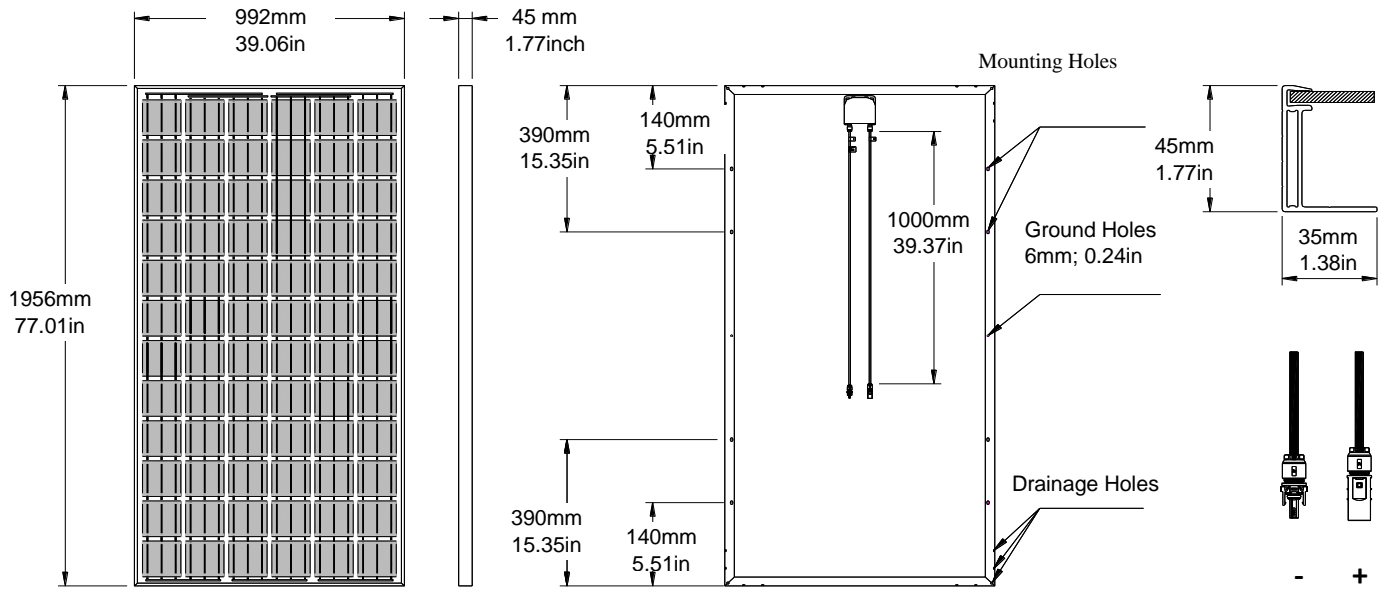
## Warranty

- ❖ 10 Years Product Workmanship Warranty
- ❖ 12 Years Minimum 90% Power Output
- ❖ 25 Years Minimum 80% Power Output

**25 Years Linear Power Output Warranty**



## Physical Specification



## Electrical Specification

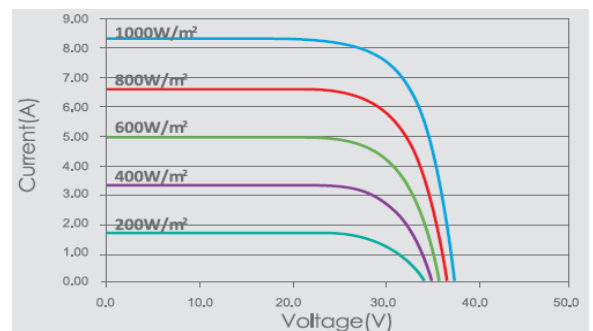
Model Type	Unit	ESP 320	ESP 315	ESP 310	ESP 305	ESP 300
Maximum Power (Pmax)	W	320	315	310	305	300
Module Efficiency	%	16.5	16.3	16.0	15.83	15.56
Open Circuit Voltage (Voc)	V	46.00	45.7	45.5	45.23	45.21
Short Circuit Current (Isc)	A	9.50	9.35	9.01	8.60	8.59
Maximum Power Voltage (Vmp)	V	37.50	37.2	37.0	36.97	36.95
Maximum Power Current (Imp)	A	8.53	8.47	8.38	8.25	8.12
Maximum System Voltage	V	1000 (TUV) / 600 (UL)				
Maximum Series Fuse Rating	A	15				
Power Tolerance		0 ~ +5W				

Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800W/m<sup>2</sup>, 20°C ambient temperature, AM 1.5 Spectrum, 1m/s wind speed.

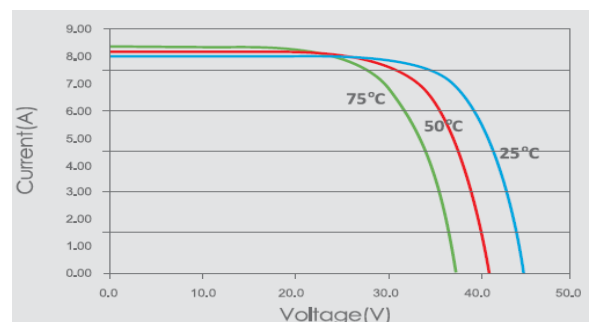
## Mechanical Specification

Module Dimension (mm)	1956 × 992 × 45
Cell Dimension (mm)	156 × 156
Number of Cell	72 (6 × 12)
Glass Thickness (mm)	3.2
Weight (kgs)	21.0
Maximum Load (TUV) (Pascal)	5400
Junction Box and Cable connector	IP65 or IP 67 rated; MC4 compatible

## IV CURVE



## Temperature Characteristics



Nominal Operating Cell Temperature (NOCT)	45 +/- 2 C
Temperature Coefficient ( Pmax)	-0.43% / C
Temperature Coefficient ( Voc )	-0.34% / C
Temperature Coefficient ( Isc )	0.06% / C
Operating Temperature	-40~85 C

The specifications are subject to change without prior notice.