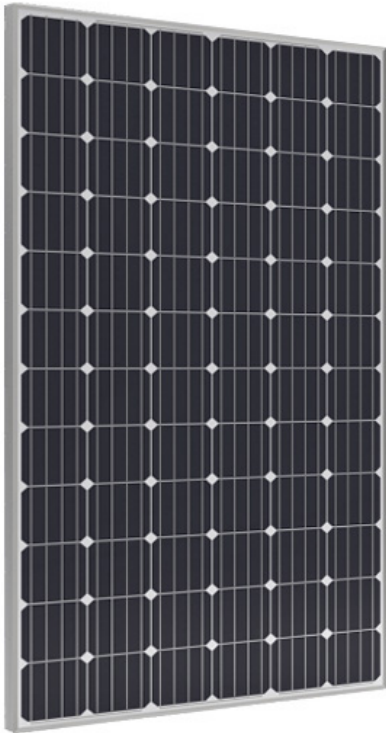


310 W - 335 W MONO-CRYSTALLINE SOLAR MODULE



- ✓ Plus power tolerance to +3% to ensure the high reliability of power output
- ✓ PV glass design improves oblique irradiance performance and enhances module yield in low-light and medium-angle-light condition
- ✓ Junction box and by-pass diodes guarantee the modules free of overheating and "hot spot effect"
- ✓ 100% EL test before and after lamination, providing higher quality assurance
- ✓ Special PV Module Insurances by world leading insurance company guarantees the benefit to PV investors and PV module users
- ✓ Easy installation and minimal maintenance with compatibility to industry standard inverters and mounting systems
- ✓ Modules certified by TÜV Nord to withstand high level of wind and snow loads (2400 Pa / 5400 Pa), atmospheric impact (Salt-mist corrosion Test, Ammonia Resistance Test), potential induced degradation (PID) test and Carbon footprint assessment

QUALIFICATIONS AND CERTIFICATES

CE-Compliant, IEC 61215 (Ed.1) application class A, TÜV Safety Class II, UL 1703



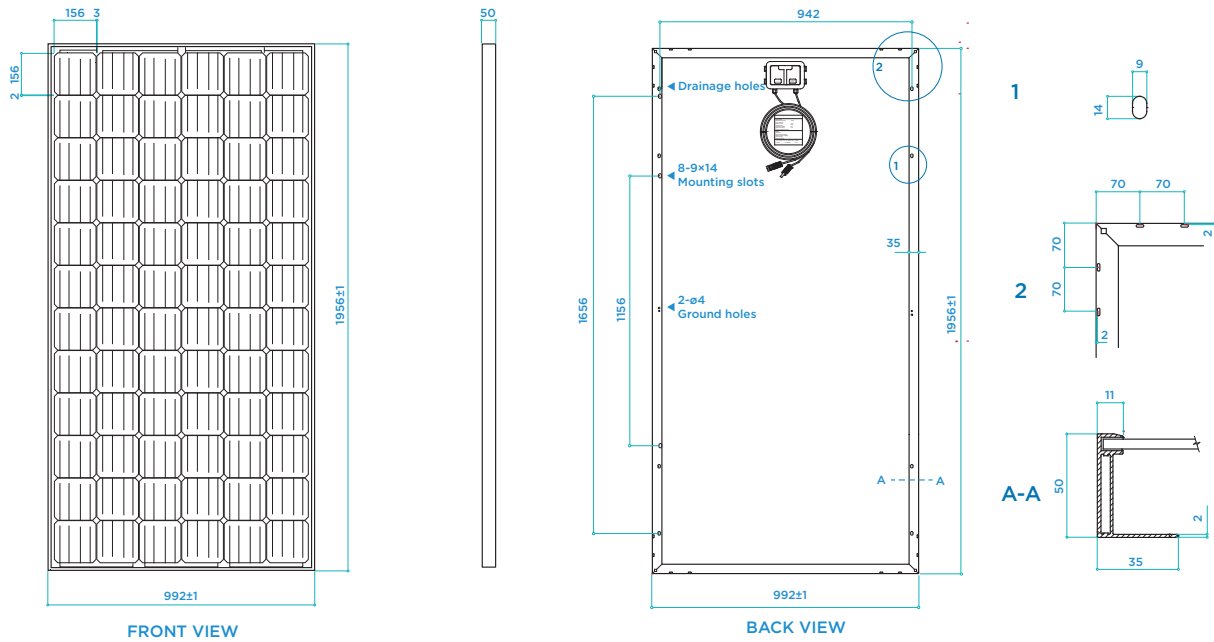
WARRANTY

10 Years: Manufacturing Warranty
 12 Years Warranty: 90% Power Output
 25 Years Warranty: 80% Power Output

MECHANICAL CHARACTERISTICS

Solar cell type	Mono-crystalline 156 × 156 mm
Dimensions	1956 × 992 × 50 mm
Weight	23.20 kg
Glass	High transmission low Iron, Tempered
Glass thickness	3.2 mm
Encapsulation	EVA (ethylene vinyl acetate)
Back side	White
Frame	Clear anodized aluminum alloy 6063T5
No of draining holes in frame	16
Type of connector	MC4 compatible
Junction box (Protection degree)	IP 67
Cable type (Cross-sectional area / length)	4 mm ² / 900 ± 5 mm

ENGINEERING DRAWINGS

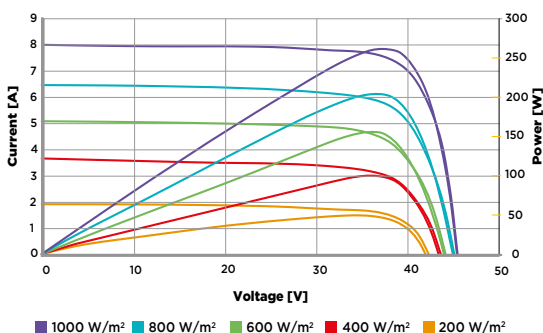


ELECTRICAL CHARACTERISTICS

SOLAR CELLS	MONO-CRYSTALLINE 156 × 156 MM 72 PCS. (6×12) - 4 BUS BARS					
Maximum Power (Pmax)	310 Wp	315 Wp	320 Wp	325 Wp	330 Wp	335 Wp
Voltage at Pmax (Umax)	37.20 V	37.40 V	37.60 V	37.80 V	38.00 V	38.20 V
Current at Pmax (Imax)	8.33 A	8.42 A	8.51 A	8.60 A	8.68 A	8.77 A
Open-circuit Voltage (Voc)	45.40 V	45.50 V	45.80 V	46.10 V	46.30 V	46.60 V
Short-Circuit Current (Isc)	9.02 A	9.12 A	9.19 A	9.31 A	9.40 A	9.49 A
Max-System Voltage (Usvmax)	1000 V (iec), 600 V (UL)					
Cell Efficiency	18.40 %	18.60 %	18.80 %	19.20 %	19.40 %	19.70 %
Module Efficiency	15.90 %	16.20 %	16.30 %	16.70 %	17.00 %	17.30 %
Number of By-pass Diodes	6					
Maximum Series Fuse	15 A					
Temperature Coefficient of Pmax	- 0.45 % / °C					
Temperature Coefficient of Voc	- 0.34 % / °C					
Temperature Coefficient of Isc	- 0.05 % / °C					
Nominal Operating Cell Temperature	47 ± 2 °C					

IV - CURVES

Current-Voltage and Power-Voltage Curve (320)



TEST PARAMETERS

Dielectric Insulation Voltage	6,000 V DC max
Operating Temperature	-40 °C to 85 °C
Max Load	5,400 Pa
Hailstone Impact	25 mm (1 inch) at 23 m/s (50mph)