



MSM210-60P MSM215-60P MSM220-60P
 MSM225-60P MSM230-60P MSM235-60P
 MSM240-60P MSM245-60P MSM250-60P

Electrical Specifications

*STC : Irradiance 1000W/m², AM1.5 spectrum, module temperature 25°C

Model type	210-60P	215-60P	220-60P	225-60P	230-60P	235-60P	240-60P	245-60P	250-60P
Peak power (Pmax)	210W	215W	220W	225W	230W	235W	240W	245W	250W
Cell Efficiency	15.0%	15.2%	15.6%	15.9%	16.3%	16.6%	17.0%	17.4%	17.8%
Maximum power voltage (Vmp)	29.0V	29.0V	29.0V	29.5V	29.5V	30.0V	30.0V	30.0V	30.5V
Maximum power current (Imp)	7.25A	7.41A	7.59A	7.63A	7.80A	7.83A	8.0A	8.17A	8.20A
Open circuit voltage (Voc)	36.0V	36.0V	36.0V	36.6V	36.6V	37.2V	37.2V	37.2V	37.8V
Short circuit current (Isc)	7.82A	8.01A	8.19A	8.24A	8.42A	8.46A	8.65A	8.74A	8.85A
Power Tolerance	±3%								
Maximum system voltage	1000VDC								
Series fuse rating (A)	15								
Number of bypass diode	6								

Temperature Coefficients

Current Temperature Coefficient $\alpha(I_{sc})$ 0.03%/°C
 Voltage Temperature Coefficient $\beta(V_{oc})$ -0.32%/°C
 Power Temperature Coefficient $\gamma(P_{max})$ -0.42%/°C

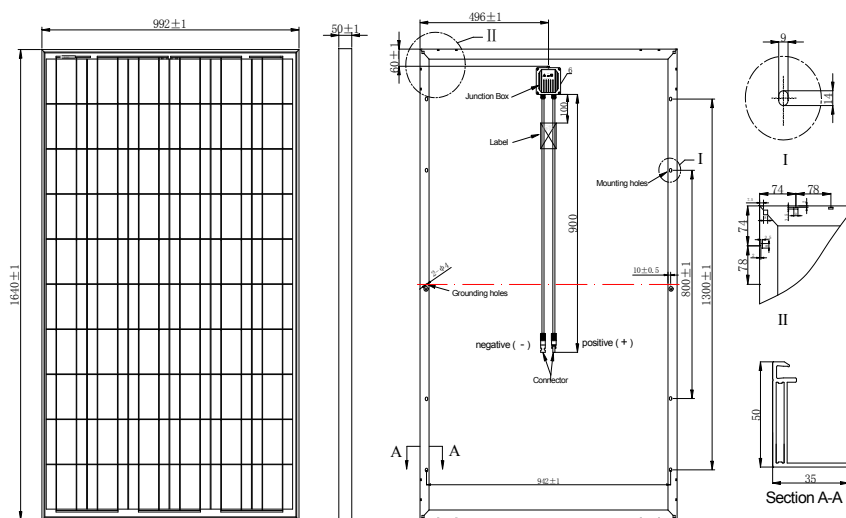
Mechanical Characteristics

Dimensions : 1640 x992 x 50mm
 (64.57x39.06x1.97 inch)
 Weight: 19.5 kg (42.99 lbs)
 Solar Cells: 60cells in series(6x 10)
 Construction: High-transmission low-iron tempered glass , EVA, TPT
 Frame: Anodized aluminum is mainly for improving corrosion resistance. Color: silver

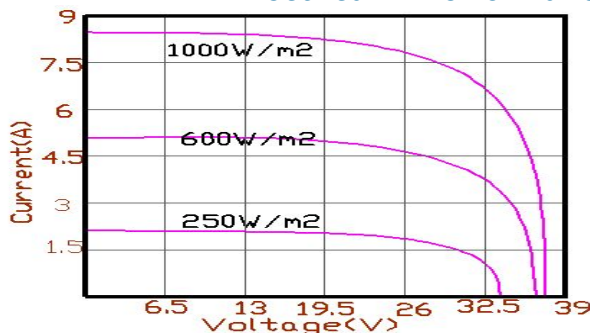
Output(Optional)

Cable LAPP(4 mm²)
 Lengths 900mm(-) and 900mm(+)
 Connector MC Plug Type IV

Module Diagram



Electrical Performance



Module Warranty:

25-year limited warranty of 80% power output;
 10-year limited warranty of 90% power output;
 5-year limited warranty of materials and workmanship.

Note: This publication summarizes product warranty and Specifications which are subject to change without notice