

BIPV Solar Module: Smile Solar SSR220MG Series



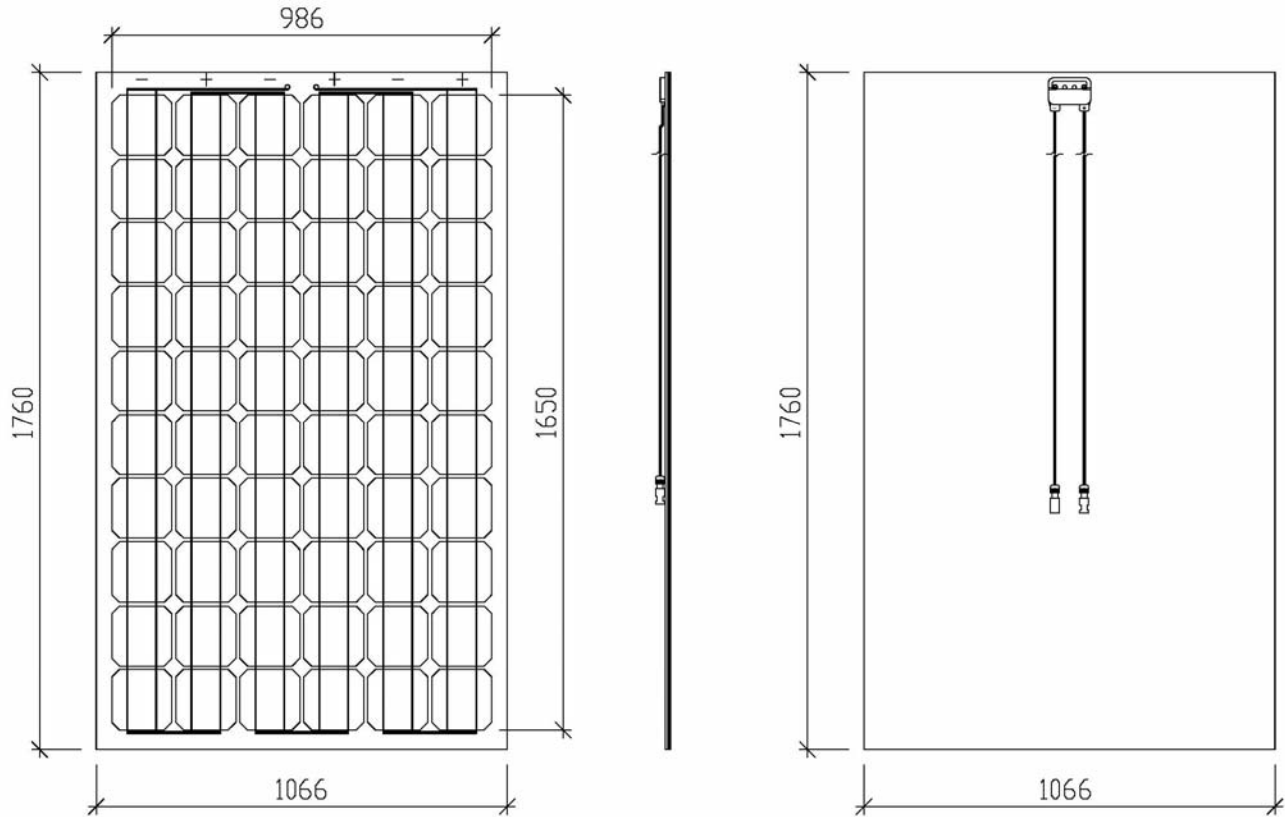
SSR200MG/SSR205MG/SSR210MG/SSR215MG/SSR220MG/
SSR225MG/SSR230MG/SSR235MG

Front View



Technical Drawing

Unit: [mm]



Electrical Characteristics: Performance at STC*1

Model Type	SSR200MG	SSR205MG	SSR210MG	SSR215MG
Nominal Peak Power, Pmax	200W±5%	205W±5%	210W±5%	215W±5%
Peak Power Voltage, Vpm	28.61V	28.95V	29.18V	29.40V
Peak Power Current, Ipm	7.00A	7.08A	7.22A	7.36A
Open Circuit Voltage, Voc	36.19V	36.62V	37.04V	37.45V
Short Circuit Current, Isc	7.58A	7.67A	7.77A	7.92A
Cell Area Efficiency	12.29%	12.60%	12.91%	13.22%

*STC: Standard Test Condition, 1000W/m², AM 1.5, 25°C

Electrical Characteristics: Performance at STC*1

Model Type	SSR220MG	SSR225MG	SSR230MG	SSR235MG
Nominal Peak Power, Pmax	220W±5%	225W±5%	230W±5%	235±5%
Peak Power Voltage, Vpm	29.69V	29.46V	29.80V	29.75V
Peak Power Current, Ipm	7.43A	7.69A	7.78A	7.90A
Open Circuit Voltage, Voc	37.63V	37.20V	37.63V	37.55V
Short Circuit Current, Isc	8.00A	8.36A	8.46A	8.57A
Cell Area Efficiency	13.52%	13.83%	14.14%	14.44%

*STC: Standard Test Condition, 1000W/m², AM 1.5, 25°C

System Integration Parameter

Maximum System Voltage	1000VDC(600VDC in US)
Series Fuse Rating	10A
Operating Temperature	-40 to 85°C

Thermal Characteristics

Temperature Coefficient TK Pmax (Peak Power)	-0.52%/°C
Temperature Coefficient TK Voc (Open Circuit Voltage)	-0.38%/°C
Temperature Coefficient TK Isc (Short Circuit Current)	+0.03%/°C
Temperature Coefficient TK Vmp (Peak Power Voltage)	-0.415%/°C

Component Materials

Cell Q'ty per Module	60 pcs
Cell Type	Mono-crystalline Silicon
Cell Dimensions	156 x 156 mm
Laminate Construction	Front: Low-Iron Tempered Glass 5mm (Basic design=5mm. >5mm or above, ex. 6mm. custom-made possible) Encapsulation: Solar Cells Embedded in EVA Rear: Tempered Glass 6mm (Basic design=6mm. >6mm or above, ex. 7mm. custom-made possible)
Junction Box	IP65 (TÜV Certified)
Bypass Diodes	3 pcs
Cable	2 Cables(TÜV Certified)
Connector	TÜV Certified
Frame	No

Physical Specifications

Dimension (L×W×H)	1760 × 1066 ×(11.5±1) mm
Weight (kg)	53.5 kg

Quality Assurance

IEC61215:2005	TÜV Certified
EN61730-1& EN61720-2:2007	TÜV Certified

Performance Warranty

90%	10 years
80%	25 years