

BIPV Solar Module: Smile Solar SSR220BG Series



SSR200BG/SSR205BG/SSR210BG/SSR215BG/SSR220BG/
SSR225BG

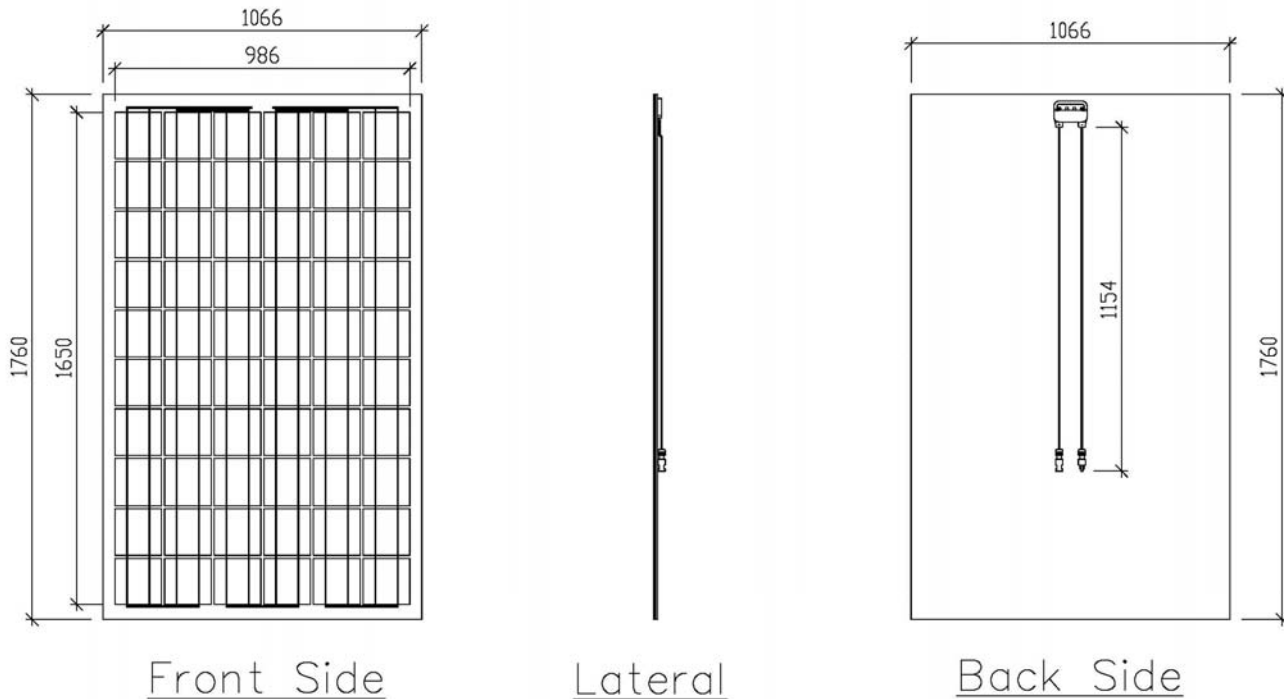
Front View



Technical Drawing



Unit: [mm]



Electrical Characteristics: Performance at STC*1

Model Type	SSR200BG	SSR205BG	SSR210BG	SSR215BG
Nominal Peak Power, Pmax	200W	205W	210W	215W
Power Tolerance	-0~+5%	-0~+5%	-0~+5%	-0~+5%
Peak Power Voltage, Vmp	28.33V	28.39V	28.85V	28.87V
Peak Power Current, Imp	7.07A	7.25A	7.29A	7.47A
Open Circuit Voltage, Voc	36.31V	36.37V	36.43V	36.49V
Short Circuit Current, Isc	7.56A	7.74A	7.79A	7.96A
Module Efficiency	10.66%	10.93%	11.19%	11.46%
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	SSR220BG	SSR225BG
Nominal Peak Power, Pmax	220W	225W
Power Tolerance	-0~+5%	-0~+5%
Peak Power Voltage, Vmp	28.88V	28.90V
Peak Power Current, Imp	7.64A	7.79A
Open Circuit Voltage, Voc	36.53V	36.59V
Short Circuit Current, Isc	8.21A	8.33A
Module Efficiency	11.73%	11.99%
Cell Area Efficiency	13.52%	13.83%

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

System Integration Parameter & Safety Rating

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) γ	-0.423%/°C
Temperature Coefficient TK Voc (Open Circuit Voltage) β	-0.298%/°C
Temperature Coefficient TK Isc (Short Circuit Current) α	+0.088%/°C
Temperature Coefficient TK Vmp(Peak Power Voltage) β	-0.411%/°C

Measurement tolerances Pmp@STC±5% all other electrical parameters±10%

Component Materials

Cell Q'ty per Module	60 pcs
Cell Type	Poly-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