

HS-G12R-18BB

255-262 Series

Heterojunction Solar Cell
Great Performance With N-type Wafers



HJT

The HJT solar cell represents a new generation of superior bifacial solar technology. It is made out of an N-type wafer, which combines the merits of crystalline silicon and thin-film technologies to form a single composite structure. As one of the most effective cell passivation technologies on the market, the HJT ensures that solar cells deliver high efficiency and great power even in hot climates.



Higher Cell Efficiency

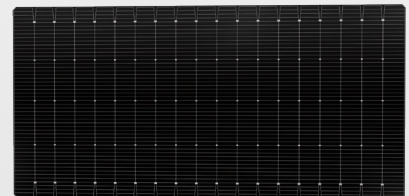
- Wafer gettering combined with microcrystalline cell process to guarantee higher cell efficiency.
- Excellent temperature coefficient ensures more power output in high temperature environments.
- Lower LID and superior anti-PID performance result in extremely low power generation loss.



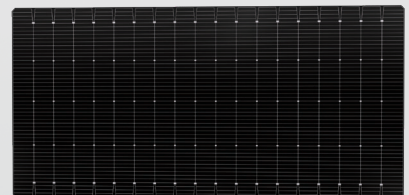
Maximizing Module Power

- 18-busbar technology combines half-cell design to deliver higher energy output for maximum cost savings.
- Bifacial structure ensures more sunlight captured and converted into power from the back side.
- Extremely low LID and PID enhance reliability and longevity.
- Lower LCOE by HJT solar system.

Front side

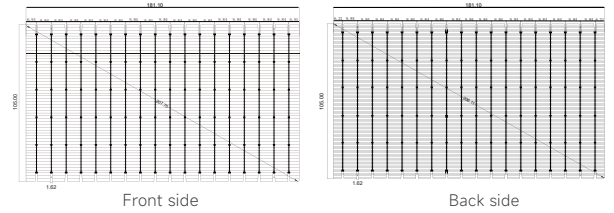


Back side



Mechanical Characteristics

Product	HJT microcrystalline solar cell
Format	N-type, 182.1mm*105mm ±0.15mm
Average Thickness (cell)	110+20/-10μm, 120+20/-10μm
Front Surface(-)/Back Surface(+)	18 busbars; Coated with anti-reflecting ITO layer of dark blue appearance



Front side

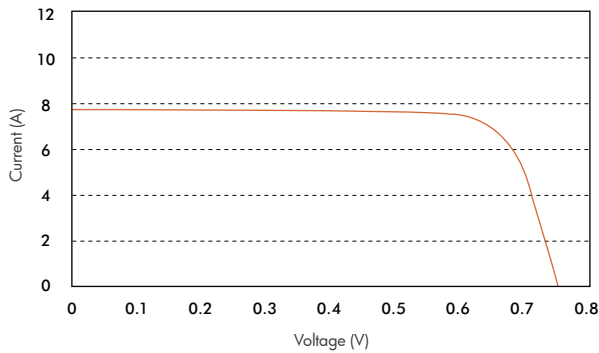
Back side

Electrical Characteristics (STC)

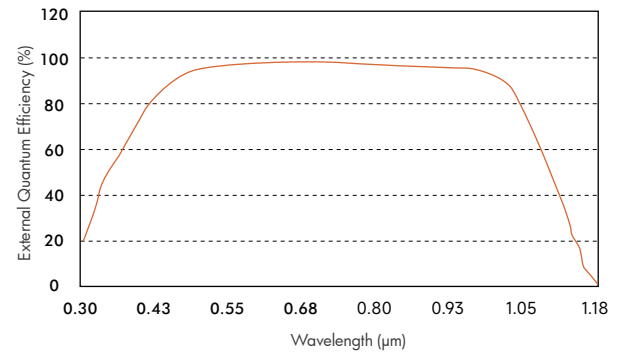
Power Class		HS-G12R-255	HS-G12R-256	HS-G12R-257	HS-G12R-258	HS-G12R-259	HS-G12R-260	HS-G12R-261	HS-G12R-262
Maximum Power	P _{mpp} [W]	4.87	4.89	4.91	4.93	4.95	4.97	4.99	5.01
Short Circuit Current	I _{sc} [A]	7.63	7.64	7.64	7.65	7.65	7.66	7.68	7.69
Open Circuit Voltage	V _{oc} [V]	0.754	0.754	0.755	0.755	0.755	0.756	0.755	0.756
Maximum Operating Current	I _{mp} [A]	7.215	7.223	7.234	7.245	7.257	7.271	7.287	7.303
Maximum Operating Voltage	V _{mpp} [V]	0.677	0.679	0.681	0.682	0.683	0.685	0.685	0.686
Efficiency	η [%]	25.5	25.6	25.7	25.8	25.9	26.0	26.1	26.2

*STC: AM1.5, 1000W/m², 25°C.

I-V Curve



Spectral Response



Packaging Specifications

pcs/box	box/carton	pcs/carton
144	18	2592

Temperature Coefficients

Temperature Coefficient of P _{max}	-0.24%/°C
Temperature Coefficient of V _{oc}	-0.22%/°C
Temperature Coefficient of I _{sc}	+0.04%/°C

Remind of Storage

If the sealing foil around the cell boxes is damaged, broken or opened, we suggest that:

- Store the cells in a dry and clean place at room temperature.
- Process the cells within 10 days of opening the seal.



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