N-TYPE HJT HIGH EFFICIENCY CELL

ENEC-210NHH20BB-255-262

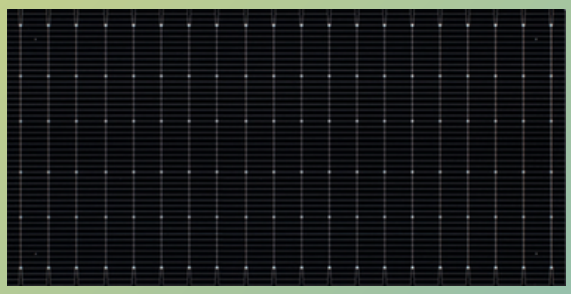
25.5-26.2 %

Cell Efficiency Range

20BB

Busbar

- High Bifaciality
- High anti-LID & anti-PID performance
- Low temperature Coefficient
- High Efficiency
- N-Type HJT Technology



Front Side

Rear Side

Higher Conversion Efficiency

The passivation effect of the amorphous silicon layers in HJT cells reduces recombination losses of carriers. In contrast, the passivation quality of Perc and Topcon cells is not as good in this regard. The recombination of electron - hole pairs in HJT is minimized, allowing more photons to be effectively converted into electrical energy.

Low - Temperature Process

HJT technology uses a low - temperature manufacturing process. The process temperature is usually below 200°C, which is much lower than that of the high - temperature diffusion process in Perc or Topcon Cell(usually above 800 - 900°C). The low - temperature process can reduce the thermal stress on the silicon wafer and avoid damage to the crystal structure of the wafer.

Better Temperature Coefficient

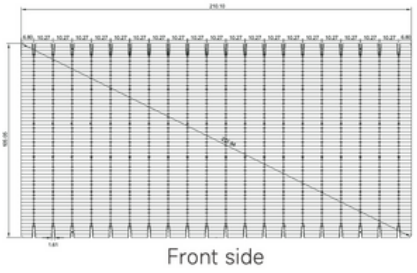
HJT Cells have a better temperature coefficient. Their power output decreases less with increasing temperature compared to Perc and Topcon cells. In practical applications, as the temperature rises during the day, the power generation performance of HJT cells is more stable. For example, for every 1°C increase in temperature, the power loss of HJT cells is about 0.25 - 0.3% lower than that of Perc cells.

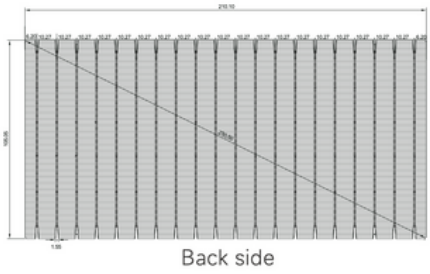
Bifaciality

HJT Cells have excellent bifaciality. The structure of HJT allows both sides of the cell to absorb sunlight and generate electricity effectively. The bifacial gain of HJT cells can reach up to 30% in some cases. In contrast, although Topcon and Perc cells also have some bifacial capabilities, their performance is not as outstanding as that of HJT.

MAIN INFORMATIONS

Product	HJT microcrystalline solar cell
Format	N-type, 210.1mm*105.05mm ±0.15mm
Average Thickness (cell)	110+20/-10μm, 120+20/-10μm
Front Surface(-)/Back Surface(+)	20 busbars; Coated with anti-reflecting ITO layer of dark blue appearance


Front side

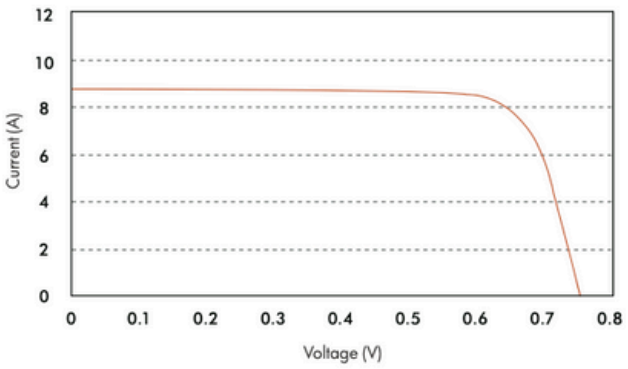

Back side

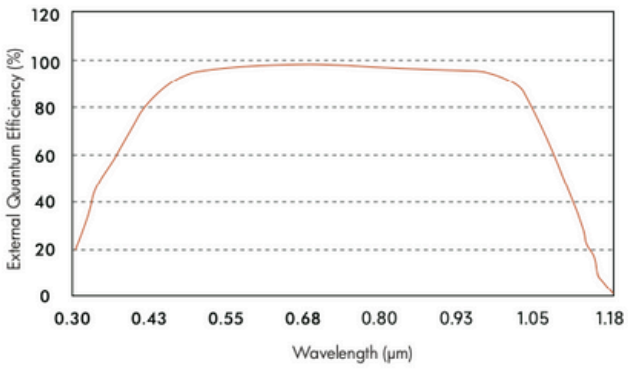
ELECTRICAL DATA (STC)

Class		255	256	257	258	259	260	261	262
Maximum Power	Pmpp [W]	5.62	5.64	5.67	5.69	5.71	5.73	5.75	5.78
Short Circuit Current	Isc [A]	8.80	8.81	8.82	8.84	8.84	8.85	8.86	8.87
Open Circuit Voltage	Voc [V]	0.749	0.750	0.750	0.750	0.750	0.750	0.750	0.751
Maximum Operating Current	Impp [A]	8.336	8.348	8.364	8.381	8.395	8.409	8.422	8.434
Maximum Operating Voltage	Vmpp [V]	0.676	0.678	0.679	0.680	0.681	0.683	0.684	0.685
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.

IV CURE &SPECTRAL RESPONSE





TEMPERATURE COEFFICIENTS

Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.24%/°C

CAUTIONS:

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.

PACKAGE INFORMATIONS

PCS/BOX	144
BOX/CARTON	18
PCS/CARTON	2592