



GOLDEN SOLAR

Make Solar Energy More Efficient!



# JGYC-210-12BB Heterojunction Solar Cells

## ✓ Heterojunction Cell Technology

A heterojunction cell combines all the advantages of crystalline and thin-film solar technologies in a single hybrid structure.

## ✓ High Bifaciality

The bifaciality is > 90%, and the power output of HJT cells is about 3%-6% higher than that of bifacial PERC and TopCon cells.

## ✓ Excellent Weak Light Performance

Under the lower irradiation intensity, HJT cells have an average of 1-2% more power per watt than PERC bifacial cells.

## ✓ The Highest Efficiency

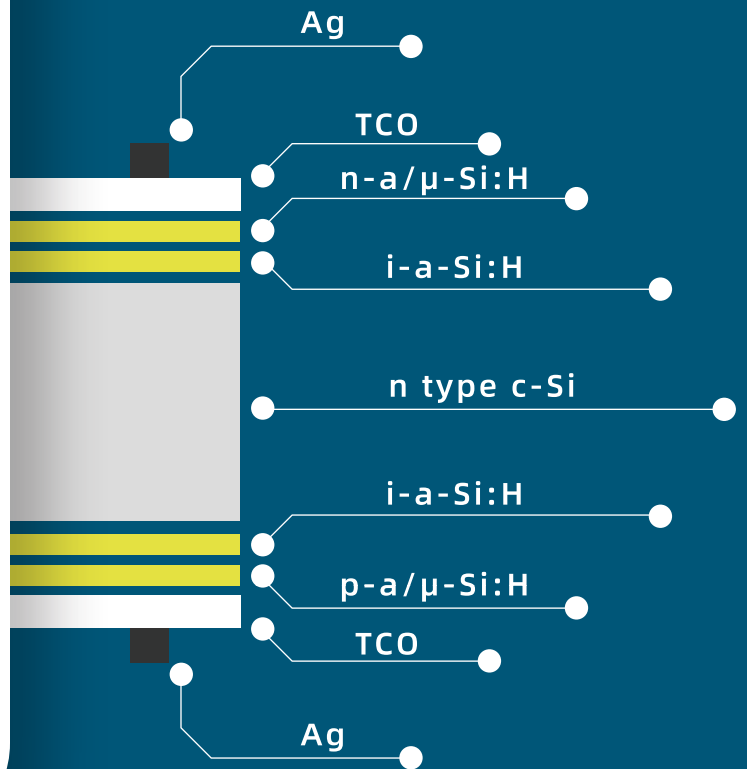
By using 210 mm N-type silicon wafer, the highest power of HJT cells can be up to 5.68W, and its efficiency can be up to 25.7%.

## ✓ Higher Efficiency at High Temperature

The lowest temperature coefficient can be up to -0.243%/K. Under high temperature environments, the output of HJT cells per W is about 0.6-3.9% higher than that of bifacial TOPCon cells.

## ✓ Anti-PID

Battery surface is TCO, so charge will not produce polarization phenomenon on the cells' surface TCO.

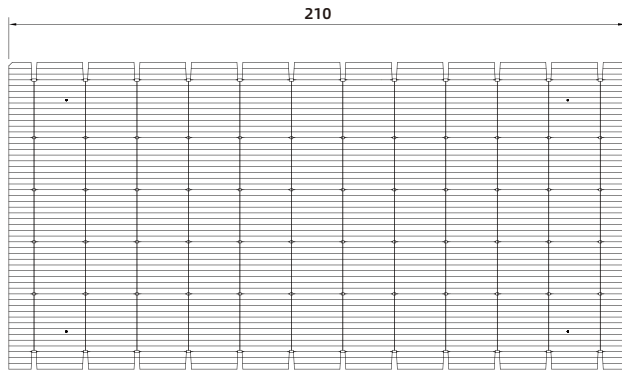


# JGYC-210-12BB

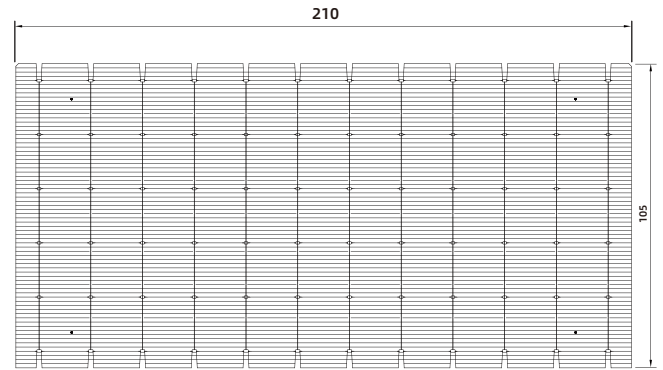


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## The Cells Front



## The Cells Back



## Electrical Performance Parameters

Efficiency Range	Eff (%)	Pmpp (W)	Vmpp (V)	Impp (A)	Voc (V)	Isc (A)	FF (%)
JG-210M-25.0	25.0	5.52	0.676	8.15	0.748	8.52	86.58
JG-210M-24.9	24.9	5.50	0.675	8.14	0.748	8.50	86.39
JG-210M-24.8	24.8	5.47	0.664	8.24	0.746	8.63	84.90
JG-210M-24.7	24.7	5.45	0.660	8.25	0.744	8.65	84.54
JG-210M-24.6	24.6	5.43	0.660	8.22	0.744	8.63	84.48
JG-210M-24.5	24.5	5.41	0.657	8.22	0.743	8.63	84.26
JG-210M-24.4	24.4	5.39	0.656	8.21	0.743	8.62	84.01
JG-210M-24.3	24.3	5.37	0.653	8.21	0.743	8.62	83.72
JG-210M-24.2	24.2	5.35	0.651	8.20	0.743	8.62	83.43

The amplitude of Voc (Isc) decreasing with irradiation intensity based on STC (1000W/m<sup>2</sup>, AM1.5, 25°C).

## Irradiation Dependence Characteristics

Irradiation (W/m <sup>2</sup> )	Voc	Isc
1000	1.0	1.0
900	0.99	0.9
800	0.99	0.8
600	0.98	0.6
400	0.96	0.4

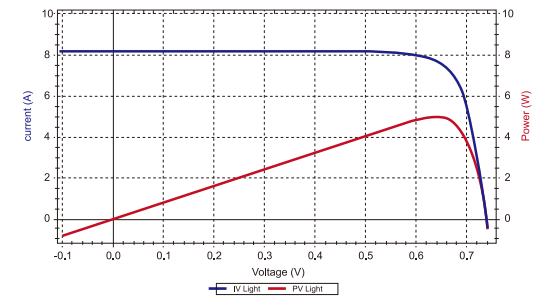
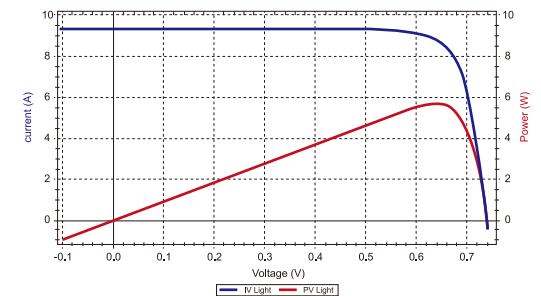
## Temperature Coefficient

Voc	-0.243%/K
Isc	+0.032%/K
Pmax	-0.243%/K

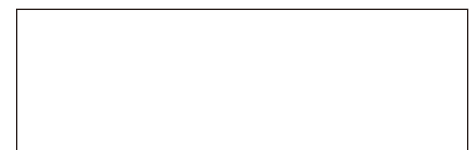
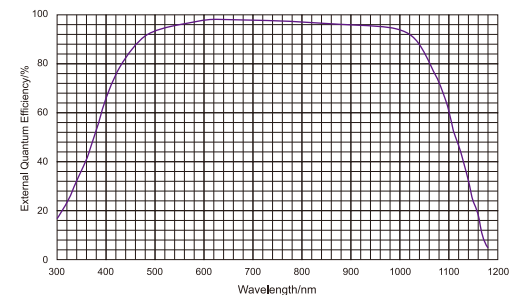
## Mechanical data and Design

Dimension	210mm×105mm±0.25mm
Thickness	130±20μm
Front (-)	12*0.06mm Busbar(Silver), Blue layer (TCO) (In order to improve efficiency, it will be continuously optimized and upgraded)
Back (+)	12*0.06mm Busbar(Silver), Blue layer (TCO) (In order to improve efficiency, it will be continuously optimized and upgraded)

## I-V Curves



## Spectral Response



\*The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the ongoing innovation and product enhancement. Golden Solar reserves the right to make necessary adjustments to the information described herein at any time without further notice.