

Make Solar Energy More Efficient!

HJT

JGYC-182-16BB 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 1%-3% 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

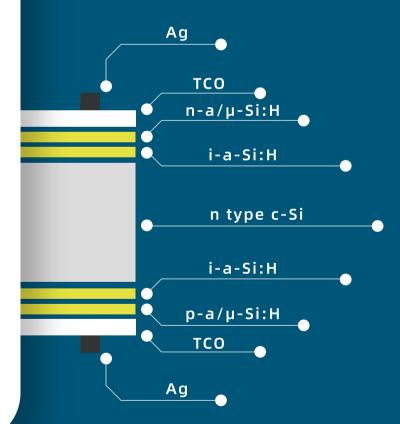
By using 182 mm N-type silicon wafer, the maximum power of half cells can reach 4.13 W, and the efficiency can be up to 25%.

Higher Efficiency at High Temperature

The lowest temperature coefficient can be up to -0.254%/℃. Under high temperature environments, the output of HJT cells per W is about 0.5%-1.5% higher than that of bifacial TOPCon cells.

🗹 Anti-PID, Anti-LID

Cells' surface is coated with TCO, so the charge will not induce polarization phenomenon on the cells' surface.

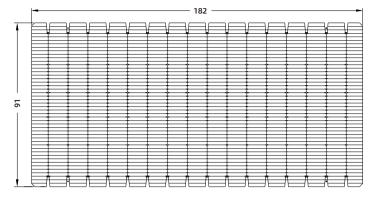


JGYC-182-16BB

The Cell's Front



The Cell's Back



Electrical Performance Parameters

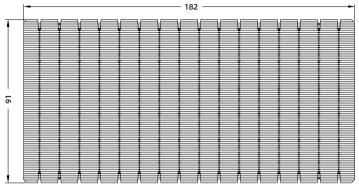
Efficiency Range		Eff	Pmpp	lsc	Voc	
		(%)	(W)	(A)	(V)	
JG-182	2M-2500	25.0	4.13	6.518	0.748	
JG-182	2M-2490	24.9	4.11	6.516	0.748	
JG-182	2M-2480	24.8	4.09	6.513	0.748	
JG-182	2M-2470	24.7	4.08	6.511	0.748	
JG-182	2M-2460	24.6	4.06	6.509	0.748	
JG-182	2M-2450	24.5	4.04	6.507	0.748	
JG-182	2M-2440	24.4	4.03	6.504	0.748	
JG-182	2M-2430	24.3	4.01	6.511	0.747	

The amplitude of Voc (Isc) decreasing with irradiation intensity based on STC (1000W/m², AM1.5, 25°C).

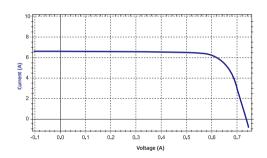
Irradiation Dependence Characteristics					
lrradiation (W/m²)	Voc	lsc			
1000	1.0	1.0			
900	0.99	0.9			
800	0.99	0.8			
600	0.98	0.6			
400	0.96	0.4			

Temperature Coefficient				
Voc	-0.243 %/°C			
lsc	+0.033 %/°C			
Pmax	-0.254 %/°C			

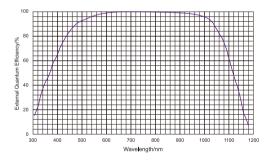
Mechanical data and Design				
Dimension	182mm×91mm±0.25mm			
Thickness	130µm+20µm/-10µm			
Front (-)	18*0.04mm Busbar(Silver), Blue layer (TCO) (In order to improve efficiency, it will be continuously optimized and upgraded)			
Back (+)	18*0.04mm Busbar(Silver), Blue layer (TCO) (In order to improve efficiency, it will be continuously optimized and upgraded)			

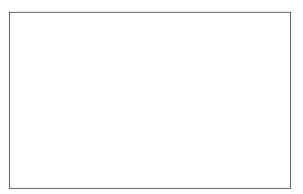


I-V Curve (25%)



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.