



# 96-cell Bifacial HJT

## PV Panel

### Electrical Characteristics (STC\*)

AL-210R-B96	DSN430	DSN435	DSN440	DSN445	DSN450	
Maximum Power (Pmax)	430 W	435 W	440 W	445 W	450 W	
Module Efficiency (%)	21.50%	21.80%	22.00%	22.30%	22.50%	
Optimum Operating Voltage (Vmp)	30.39 V	30.50 V	30.61 V	30.72 V	30.83 V	
Optimum Operating Current (Imp)	14.16 A	14.27 A	14.38 A	14.49 A	14.60 A	
Open Circuit Voltage (Voc)	36.32 V	36.42 V	36.52 V	36.62 V	36.72 V	
Short Circuit Current (Isc)	15.09 A	15.20 A	15.31 A	15.42 A	15.53 A	
Operating Module Temperature	-40 to + 85 °C					
Maximum System Voltage	DC1500V (IEC)					
Maximum Series Fuse	30 A					
Power Tolerance	0 ~ +5 W					
Bifaciality	90% ± 5%					

### Electrical Characteristics (BSTC\*\*)

Maximum Power (Pmax)	480 W	485 W	490 W	495 W	500 W
Optimum Operating Voltage (Vmp)	34.60 V	34.86 V	35.12 V	35.38 V	35.63 V
Optimum Operating Current (Imp)	13.88 A	13.92 A	13.96 A	14.00 A	14.04 A
Open Circuit Voltage (Voc)	40.87 V	41.14 V	41.41 V	41.68 V	41.94 V
Short Circuit Current (Isc)	14.46 A	14.49 A	14.53 A	14.57 A	14.61 A

### Mechanical Characteristics

Cell Type	HJT
Cell Connection	96 (6*16)
Module Dimension	1762*1134*30 mm
Weight	21.8 kg
Junction Box	IP68
Output Cable	4mm, 1200mm in length, UV resistant
Connector Type	MC4 original
Frame	Anodised aluminum alloy (Black)
Front Load	5400 Pa
Rear Load	2400 Pa
Glass Thickness	(Front) 1.6mm anti-reflective solar glass ;(Back) 1.6mm solar glass

### Temperature Characteristics

Nominal Operating Cell Temp. (NOCT)	44 ± 2 °C
Temperature Coefficient of Pmax	-0.24% / °C
Temperature Coefficient of Voc	-0.22% / °C
Temperature Coefficient of Isc	+0.04% / °C

### Safety & Warranty

Safety Class	Class II
Product Warranty	30 Year
Performance Warranty	30 Year Linear Warranty***

### Shipping Configurations

Container Size	40' HQ
Pallets Per Container	26
Modules Per Pallet (pcs)	36
Modules Per Container (pcs)	936

\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25 °C, AM=1.5; Tolerance of Pmax is within +/- 3%.

\*\*BSTC: Front side irradiation 1000 W/m<sup>2</sup>, back side reflect irradiation 135 W/m<sup>2</sup>, AM=1.5, ambient temperature 25 °C.

\*\*\*Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year is no more than 0.375%, and the power is no less than 88% until the 30th year.



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