



# 210 Series

650-675W

Bifacial MBB Mono Half-cell Module

**POWER OUTPUT RANGE** 

650-675W

MAXIMUM MODULE EFFICIENCY

21.7 %

**POWER WARRANTY** 

30 years

## **Characteristic**



#### Higher Power Output

1500V system voltage, reduce the



#### **Double-sided Power Generation**

The power gain of both sides,the back side can increase up to 25% of the total



#### Half-cell and Lower Power Loss Design



#### **Best Solution to Harsh Conditions**

Pass the mechanical load test, front 5400Pa and back 2400Pa



#### **Excellent PID Resistance**

Excellent Anti-PID Performance, guarantee less power degradation



#### **High Reliability Based On Strict** Quantity.Control

Over 100 internal tests including ultraviolet irrtadiation, heat-recycling, damp heat(DH) test, humidity-freeze(HF) test and etc.







# TOENERGY Technical Parameter

∷ Electrical Data @STC						
Peak power-Pmax(Wp)	650	655	660	665	670	675
Power tolerance(W)	±3%					
Open circuit voltage - Voc(V)	45.49	45. 69	45. 89	46.09	46.29	46.49
Maximum power voltage - Vmpp(V)	37.87	38. 05	38. 23	38.41	38.59	38.78
Short circuit current - Im(A)	18.18	18. 23	18. 28	18.33	18.39	18.44
Maximum power current - Impp(A)	17.17	17. 22	17. 27	17.32	17.36	17.41
Module efficiency um(%)	20.9	21.1	21. 2	21.4	21.6	21.7

Standard testing condition(STC): Irradiance 1000W/m², Temperature 25°C, AM 1.5

∰ Mechanical Data				
Cell size	Mono 210×210mm			
NO.of cells	132Half Cells (6×22)			
Dimension	2384*1303*35mm			
Weight	38. 7kgs			
Glass	2.0mm high transmission,Anti-reflectioncoating toughened glass 2.0mm Half toughened glass			
Frame	Anodized aluminum alloy			
Junction box	SeparatedJunction box IP68 3 bypass diodes			
Connector	AMPHENOLH4/MC4 connector			
Cable	4.0mm², 300mm PV CABLE, length can be customized			

## : Temperature Ratings

45±2°C Nominal operating cell temperature Temperature coefficient of Pmax -0.35%/°C -0.27%/°C Temperature coefficients of Voc 0.048%/°C Temperature coefficients of Isc

***	Maximum	Ratin	gs
	PIGAIIIIGIII	Katiii	95

Operating temperature -40°Cto+85°C

Maximum system voltage 1500v DC (IEC/UL)

Maximum series fuse rating 35A

Pass hail test Diameter 25mm, speed 23m/s

## : Warranty

10 Years Workmanship Warranty

30 Years Performance Warranty



## Packing Data

Modules per pallet	31 PCS
Modules per 40HQ container	558 PCS
Modules per 13.5m long flatcar	558 PCS
Modules per 17.5m long flatcar	713 PCS

### **Dimension**



