

210 MBB Half-cell Mono Perc Module



Power Range
645W~665W



Power Tolerance
0W~ +5W



Maximum Efficiency
21.5%

Features and Benefits



The application of multi-busbar (MBB) half-cut cell technology brings stronger resistance to shade and lower risk of hot spot.



Strict control on raw materials and process optimization of high efficiency PERC ensure better resistance against PID of PV module.



Through harsh weathering tests of sand, dust, salt mist, ammonia, etc, to get stronger weather resistance of outdoor environment.



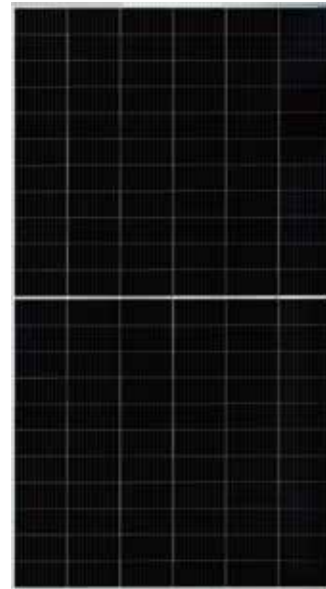
Lower oxygen and carbon content result in lower LID.



By series and parallel design, to reduce the series RS and achieve higher power output and lower BOS cost.



Lower temperature coefficient and lower operating temperature can ensure higher power generation.



First-Class Warranty



12 years product workmanship warranty



1st year power degradation no more than **2%**.
Subsequent annual power degradation no more than **0.55%**



25 years linear power output warranty

Electrical Performance Parameters | STC

Nominal Max. Power	P _{max} (W)	645	650	655	660	665
Maximum Power Voltage	V _{mp} (V)	37.2	37.4	37.6	37.8	38.0
Maximum Power Current	I _{mp} (A)	17.35	17.39	17.43	17.47	17.51
Open Circuit Voltage	V _{oc} (V)	45.1	45.3	45.5	45.7	45.9
Short Circuit Current	I _{sc} (A)	18.39	18.44	18.48	18.53	18.62
Module Efficiency	(%)	20.8	20.9	21.1	21.2	21.5
Power Tolerance	(W)	0~+5W				

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
* Power measurement tolerance ± 3%.

Electrical Performance Parameters | NMOT

Nominal Max. Power	P _{max} (W)	488	492	496	500	504
Maximum Power Voltage	V _{mp} (V)	34.8	34.9	35.1	35.3	35.4
Maximum Power Current	I _{mp} (A)	14.05	14.09	14.13	14.17	14.22
Open Circuit Voltage	V _{oc} (V)	42.5	42.7	42.9	43.0	43.2
Short Circuit Current	I _{sc} (A)	14.82	14.86	14.98	14.93	14.96

* NMOT: Irradiance 800W/m², Cell Temperature 20°C, Wind Speed 1m/s.
* Power measurement tolerance ± 3%.

Structure Performance

Solar Cell Type	210mm Mono-crystalline (Half Cell)
Solar Cell Arrangement	132pcs(6×22)
Module Dimension	2384×1303×35mm
Weight	33.8kg
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	White
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm ² PV cable, 300mm or customized length
Diode Quantity	3pcs
Wind Load / Snow Load	2400pa/5400pa
Connector	MC4 Compatible
Per Pallet	31pcs
Per Container(40'HQ)	558pcs

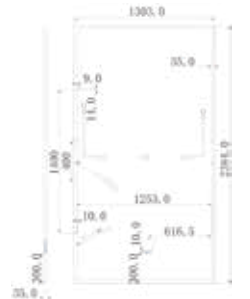
Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient (I _{sc})	+0.06%
Temperature Coefficient (V _{oc})	-0.30%
Temperature Coefficient (P _{max})	-0.39%

Maximum Parameters

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	30A

Module Dimension



Frame Cross Section

