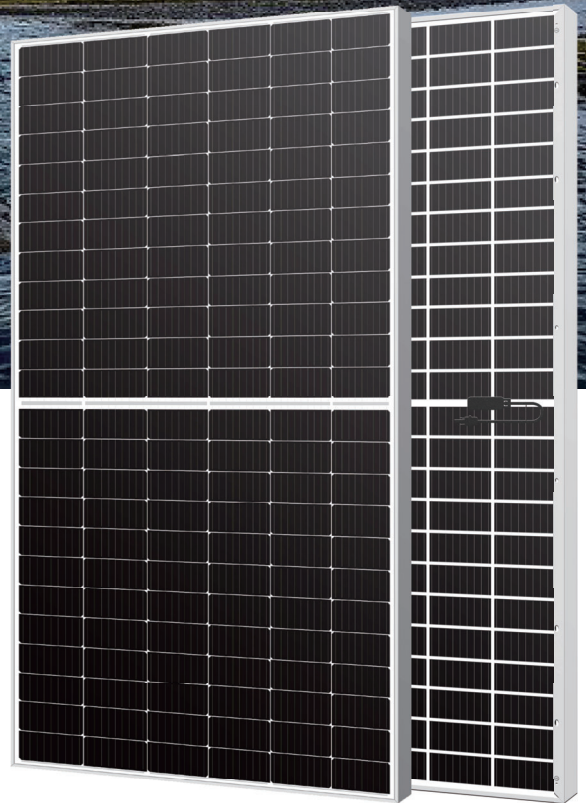


Beyond Series

455W MBB Bifacial Double Glass Mono PERC Half-cell Module S7-144GA 435~455W



- ▲ Higher output power
- ▲ Module efficiency up to 20.9%
- ▲ Lower temperature coefficient
- ▲ Up to 30% additional power gain from back side depending on albedo



- ▲ Lower LCOE (Levelized Cost Of Energy)
- ▲ High Power output lead to lower BOS cost



- ▲ ISO9001:2015 Quality Management system
- ▲ ISO14001:2015 Environmental Management System
- ▲ ISO45001:2018 Occupational Health and Safety Management System



- ▲ Salt Mist Corrosion Protect
- ▲ Ammonia Resistance

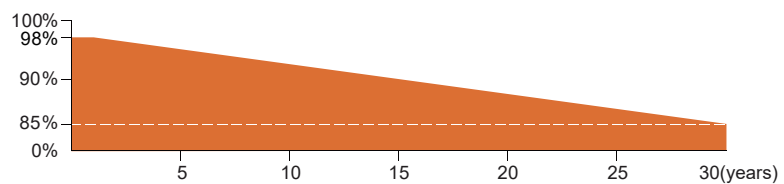


Excellent Potential Induced Degradation Resistance



Excellent Wind Load 2400Pa&Snow Load 5400Pa Under Certain Installation Method

Runda's linear performance warranty



Beyond Series

RS435~455S7-144GA

Electrical Characteristics(STC*)

| | | | | | |
|------------------------------|-------|-------|-------|-------|-------|
| Power Output(Wp) | 435 | 440 | 445 | 450 | 455 |
| Max Power Tolerance(W) | 0-5 | 0-5 | 0-5 | 0-5 | 0-5 |
| Module Efficiency(%) | 20.0 | 20.2 | 20.5 | 20.7 | 20.9 |
| Voltage Mpp-Vmpp(V) | 40.88 | 41.08 | 41.28 | 41.47 | 41.70 |
| Current Mpp-Impp(A) | 10.64 | 10.71 | 10.78 | 10.85 | 10.91 |
| Voltage Open Circuit-Voc(V) | 48.84 | 49.05 | 49.28 | 49.51 | 49.75 |
| Short Circuit Current-Isc(A) | 11.57 | 11.64 | 11.71 | 11.78 | 11.84 |

*STC:Irradiance 1000 W/m²,Environment Temperature 25°C,Air Mass AM1.5

Electrical Characteristics With 10% Rear Side Power Gain

| | | | | | |
|------------------------------|-------|-------|-------|-------|-------|
| Power Output(Wp) | 479 | 484 | 490 | 495 | 501 |
| Voltage Mpp-Vmpp(V) | 40.88 | 41.08 | 41.28 | 41.47 | 41.70 |
| Current Mpp-Impp(A) | 11.70 | 11.78 | 11.86 | 11.94 | 12.00 |
| Voltage Open Circuit-Voc(V) | 48.84 | 49.05 | 49.28 | 49.51 | 49.75 |
| Short Circuit Current-Isc(A) | 12.73 | 12.80 | 12.88 | 12.96 | 13.02 |

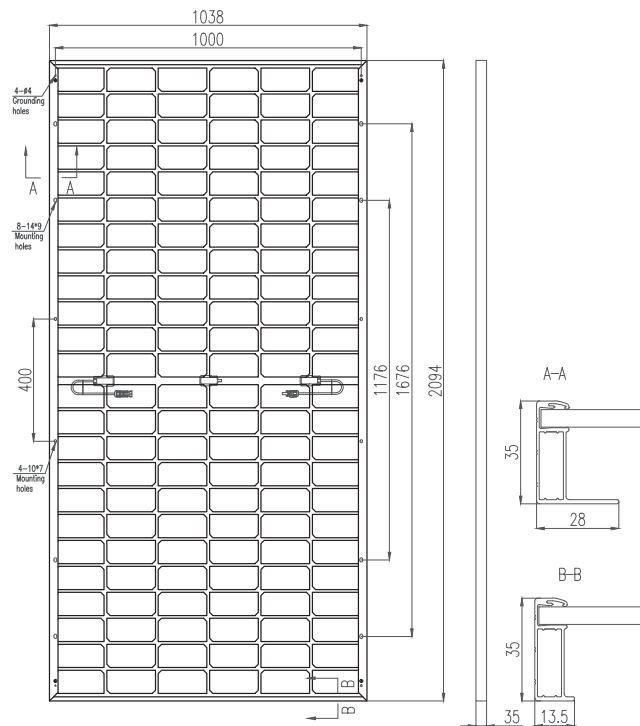
*Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure,height,tilt angle etc.)and albedo of the ground

Electrical Characteristics(NMOT*)

| | | | | | |
|------------------------------|--------|--------|--------|--------|--------|
| Power Output(Wp) | 334.18 | 338.02 | 341.86 | 345.71 | 349.55 |
| Voltage Mpp-Vmpp(V) | 37.27 | 37.45 | 37.63 | 37.80 | 38.01 |
| Current Mpp-Impp(A) | 8.97 | 9.03 | 9.09 | 9.14 | 9.20 |
| Voltage Open Circuit-Voc(V) | 45.09 | 45.29 | 45.50 | 45.71 | 45.93 |
| Short Circuit Current-Isc(A) | 9.84 | 9.90 | 9.96 | 10.02 | 10.07 |

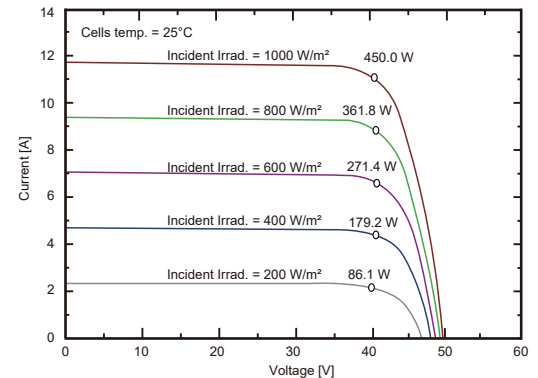
*NMOT:Irradiance 800 W/m²,Environment Temperature 20°C,Air Mass AM1.5

Module Structure Drawing

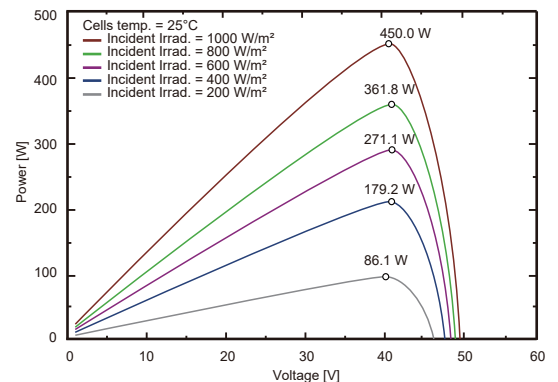


*400mm mounting holes are only suitable for 6005-T6 aluminum frame

I-V Curves(450W)



P-V Curves(450W)



Mechanical Data

| | |
|---------------------|--|
| Dimension Of Module | 2094*1038*35mm |
| Weight | 27.5kg |
| Front/Back Glass | 2.0mm heat strengthened glass |
| Cables | 4mm ² /300mm or Customized Length |
| Junction Box | IP68,3 Bypass-Diode |
| Connector | MC4 compatible |

Packaging Configuration

| | |
|------------------|---------------|
| Loading Capacity | 682 pcs/40'HQ |
|------------------|---------------|

Working Conditions

| | |
|-------------------------|-------------------------|
| Max System Voltage(VDC) | 1500V |
| Max Series Fuse Rating | 25A |
| Maximum Load Capacity | Snow 5400Pa/Wind 2400Pa |
| Operating Temperature | -40~+85 |
| Safety Class | II |
| Power Bifaciality | 70±5% |

Temperature Ratings

| | |
|--|--------|
| Temperature Coefficients of Isc(%/°C) | 0.026 |
| Temperature Coefficients of Voc(%/°C) | -0.272 |
| Temperature Coefficients of Pmpp(%/°C) | -0.353 |
| NMOT | 45±2°C |