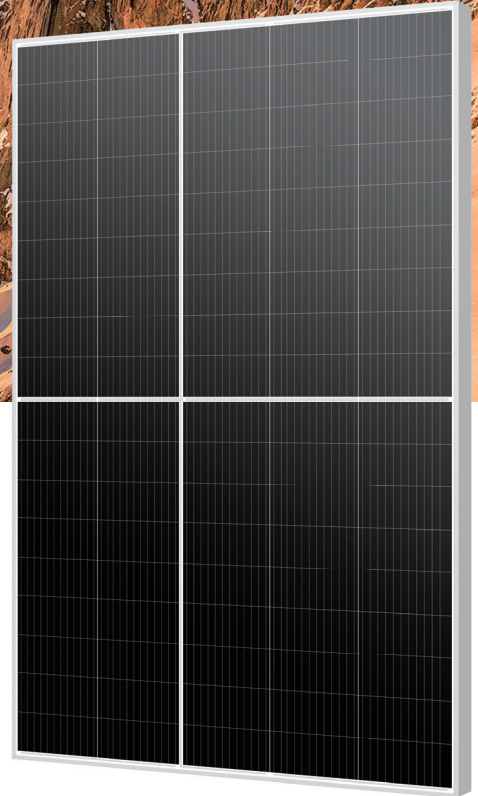


# Tarzan Series

## 450W MBB Monocrystalline Module Half-cell Module S9-90 435~450W



- ▲ Higher output power
- ▲ Module efficiency up to 20.9%
- ▲ Lower temperature coefficient



- ▲ 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

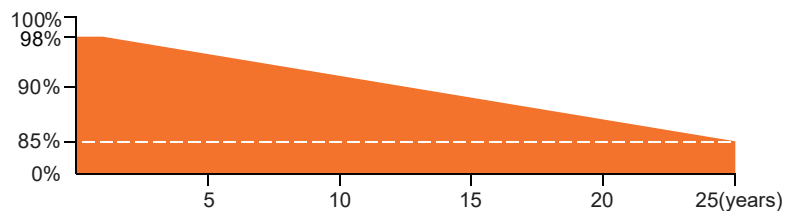


Excellent Potential Induced Degradation Resistance



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

### Runda's linear performance warranty



**12** Years  
Material&Craft  
Quality  
assurance

**25** Years  
85% output  
Power  
guarantee



# Tarzan Series

RS435~450S9-90

## Electrical Characteristics(STC\*)

Power Output(Wp)	435	440	445	450
Max Power Tolerance(W)	0-5	0-5	0-5	0-5
Module Efficiency(%)	20.2	20.5	20.7	20.9
Voltage Mpp-Vmpp(V)	25.26	25.49	25.71	25.92
Current Mpp-Impp(A)	17.22	17.26	17.31	17.36
Voltage Open Circuit-Voc(V)	30.48	30.73	30.98	31.22
Short Circuit Current-Isc(A)	18.25	18.31	18.36	18.42

\*STC:Irradiance 1000 W/m<sup>2</sup>,Cell Temperature 25°C,Air Mass AM1.5

## Electrical Characteristics(NMOT\*)

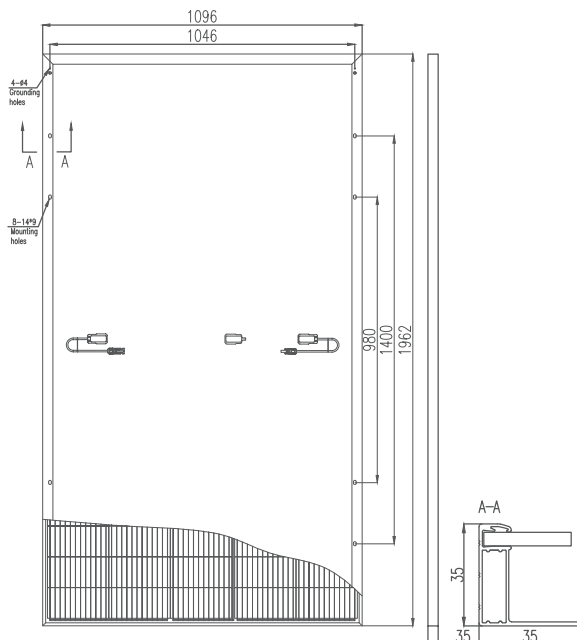
Power Output(Wp)	334.18	338.02	341.86	345.71
Voltage Mpp-Vmpp(V)	23.03	23.24	23.43	23.63
Current Mpp-Impp(A)	14.51	14.55	14.59	14.63
Voltage Open Circuit-Voc(V)	28.14	28.37	28.60	28.82
Short Circuit Current-Isc(A)	15.52	15.57	15.61	15.66

\*NMOT:Irradiance 800 W/m<sup>2</sup>,Ambient Temperature 20°C,Air Mass AM1.5, Wind Speed 1m/s

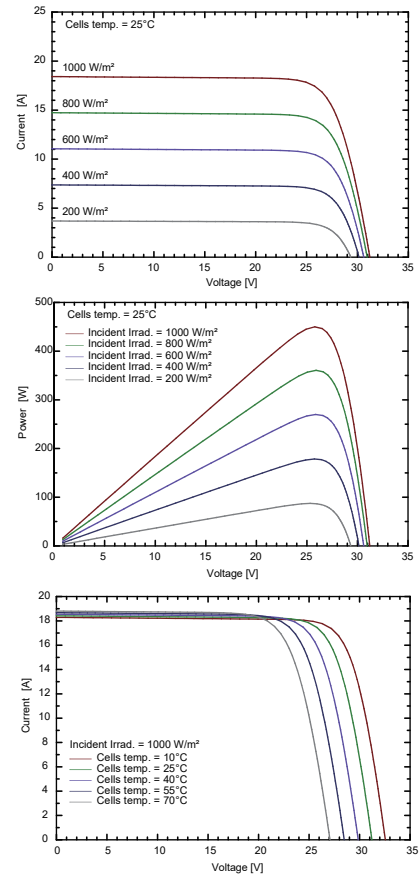
## Mechanical Data

Dimension Of Module	1962*1096*35mm
Weight	23.5kg
Glass	High transmission glass 3.2mm
Cables	4mm <sup>2</sup> /300mm or Customized Length
Junction Box	IP68,3 bypass diodes
Connector	MC4 compatible

## Module Structure Drawing



## Curves(450W)



## Packaging Configuration

Container	40'HQ
Pieces Per Pallet	31
Pallets Per Container	24
Pieces Per Container	744

## Working Conditions

Max System Voltage(VDC)	1500V
Max Series Fuse Rating	30A
Maximum Load Capacity	Snow 5400Pa/Wind 2400Pa
Operating Temperature	-40°C~+85°C
Safety Class	II

## Temperature Ratings

Temperature Coefficients of Isc(%/°C)	0.046
Temperature Coefficients of Voc(%/°C)	-0.266
Temperature Coefficients of Pmpp(%/°C)	-0.354
NMOT	45±2°C