

440W MBB

Bifacial Double Glass
Mono PERC Half-cell
Module

S9-88GA 425~440W



Highly transparent double glass design
Lower temperature coefficient
Transmittance up to 40%,(Can be customized according to customer requirements, up to 50%)



Lower LCOE (Levelized Cost Of Energy)



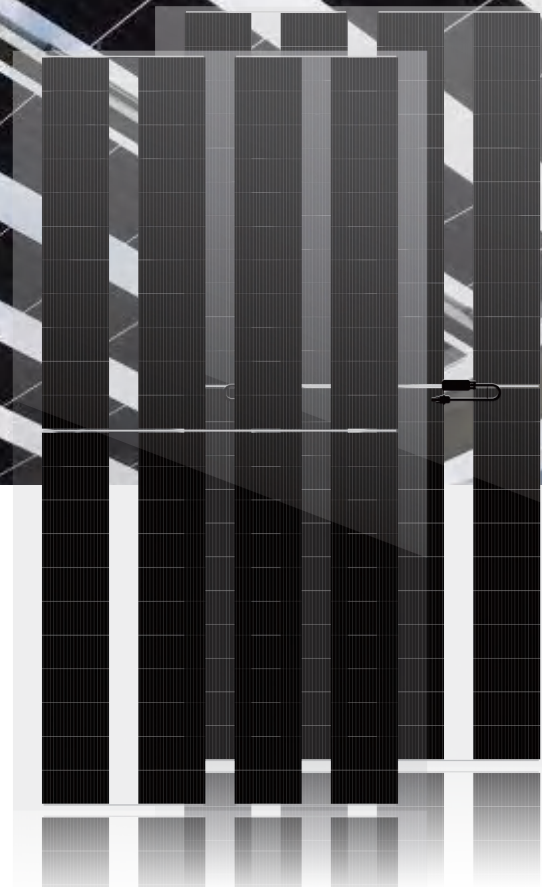
Excellent Potential Induced
Degradation Resistance



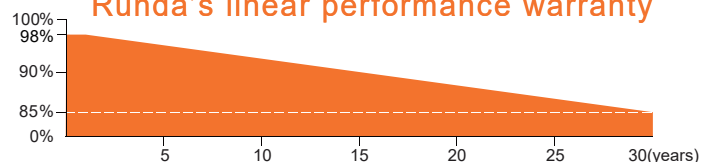
Resistant To Environmental Influences



Excellent wind/snow resilience performance



Runda's linear performance warranty



12 Years Product Warranty on Materials and Workmanship

30 Years Linear Performance Warranty

2.00% 1st year Degradation

0.45% Subsequent Annual Degradation



RS425~440S8-96GA

Electrical Characteristics(STC*)

Power Output(Wp)	425	430	435	440
Max Power Tolerance(W)	0-5	0-5	0-5	0-5
Module Efficiency(%)	13.68	13.84	14.00	14.16
Voltage Mpp-Vmpp(V)	24.72	24.94	25.16	25.37
Current Mpp-Impp(A)	17.19	17.24	17.29	17.34
Voltage Open Circuit-Voc(V)	30.10	30.29	30.48	30.67
Short Circuit Current-Isc(A)	18.59	18.64	18.69	18.74

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

Electrical Characteristics With 10% Rear Side Power Gain

Power Output(Wp)	468	473	479	484
Voltage Mpp-Vmpp(V)	24.72	24.94	25.16	25.37
Current Mpp-Impp(A)	18.91	18.96	19.02	19.08
Voltage Open Circuit-Voc(V)	30.10	30.29	30.48	30.67
Short Circuit Current-Isc(A)	20.45	20.51	20.56	20.62

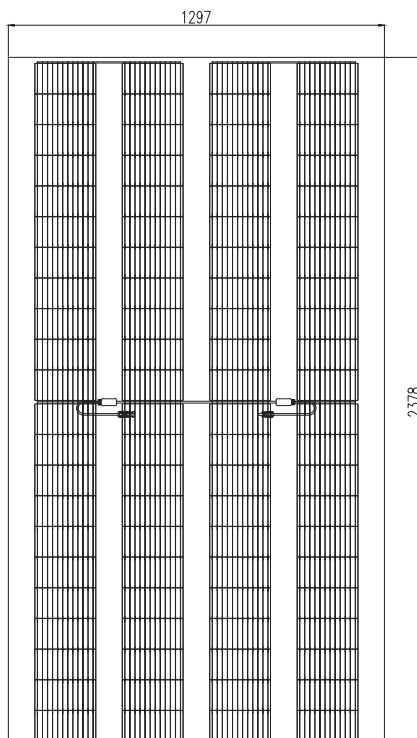
*Rear side power gain:The additional gain from the rear side compared to the power of the front side at the standard test condition.It depends on mounting (structure,height,tilt angle etc.)and albedo of the ground

Electrical Characteristics(NMOT*)

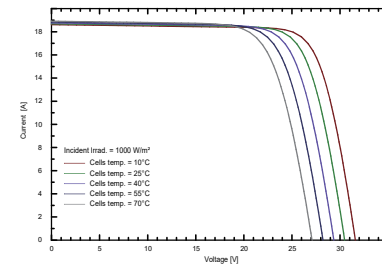
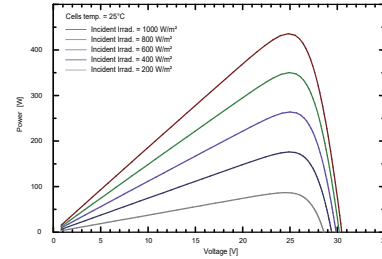
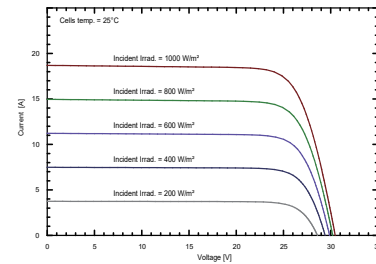
Power Output(Wp)	340	344	348	352
Voltage Mpp-Vmpp(V)	19.78	19.95	20.13	20.30
Current Mpp-Impp(A)	13.75	13.79	13.83	13.87
Voltage Open Circuit-Voc(V)	24.08	24.23	24.38	24.54
Short Circuit Current-Isc(A)	14.87	14.91	14.95	14.99

*NMOT:Irradiance 800 W/m²,Ambient Temperature 20°C,Air Mass AM1.5,Wind Speed 1m/s

Module Structure Drawing



Curves(435W)



Mechanical Data

Dimension Of Module	2378*1297mm
Weight	35kg
Front/Back Glass	2.0mm heat strengthened glass
Cables	4mm ² /300mm or Customized Length
Junction Box	IP68
Connector	MC4 compatible

Packaging Configuration

Packing Type	40'HQ
Piece/Pallet	50
Piece/Container	800 pcs

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
Transmittance	40%

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