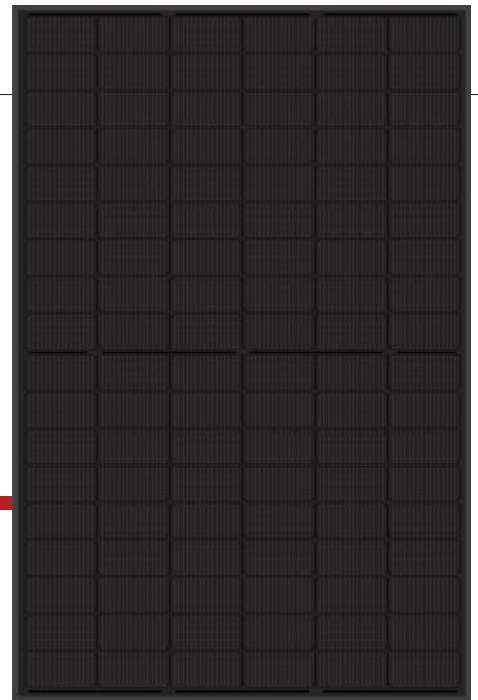


RS-108BDG Series

Bifacial Dual Glass Mono Module
N-TOPCON Half-Cell: 430-450W



108 HALF CELL
MONOCRYSTALLINE MODULE

430-450W
POWER OUTPUT RANGE

23.0%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Rosen Solar, is one of the world's top ranking manufacturer and installer of solar modules for more than 10years. Facing the increasingly serious situation of world Global warming, we are undertaking more duty and responsibility to provide more reliable and sustainable energy to protect not only human beings but also the Mother Earth. And with modules and systems delivered to more than 150 countries, Rosen is committed to building long term strategy and mutual collaboration with all installers, distributors and partners in energy protection.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716
 ISO 9001: Quality Management System
 ISO 14001: Environmental Management System
 ISO 14064: Greenhouse Gas Emissions Verification
 OHSAS 18001: Occupation Health and Safety Management System



PRODUCTS
 RS-108HC(cells)

POWER RANGE
 430-450W



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Enhanced Mechanical Load

Certified to withstand: wind load (4000 Pascal) and snow load (6000 Pascal).

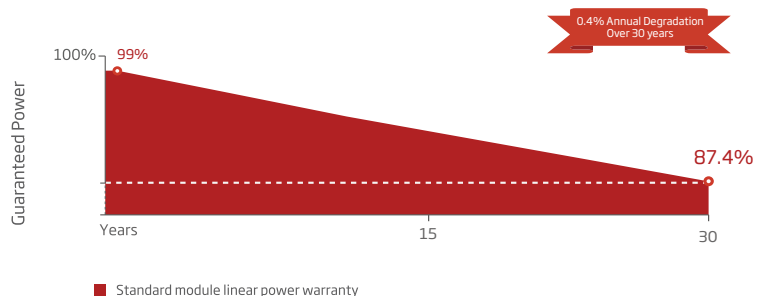


Durability Against Extreme Environmental Conditions

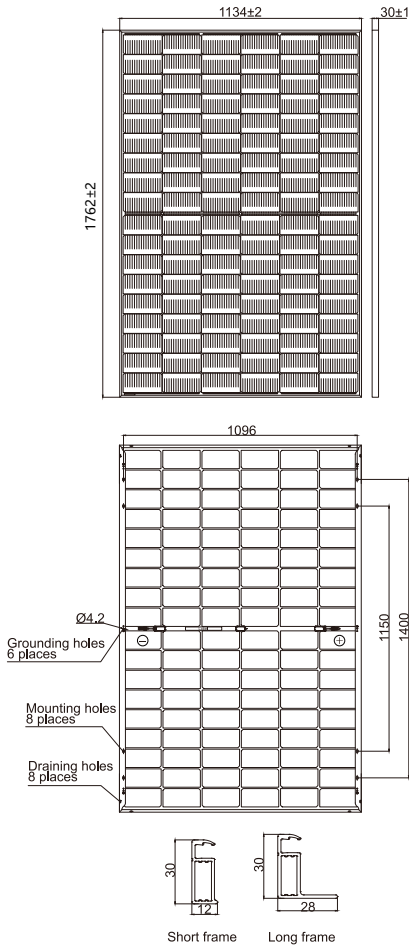
High salt mist and ammonia resistance.

PERFORMANCE WARRANTY

15 Year Product Warranty · 30 Year Power Warranty



DIMENSIONS OF PV MODULE(mm)



ELECTRICAL DATA(STC)

Peak Power Watts- $P_{MAX}(Wp)^*$	430	435	440	445	450
Power Output Tolerance- $P_{MAX}(W)$	0~+5				
Maximum Power Voltage- $V_{MPP}(V)$	32.88	33.14	33.39	33.64	33.89
Maximum Power Current- $I_{MPP}(A)$	13.08	13.13	13.18	13.23	13.28
Open Circuit Voltage- $V_{oc}(V)$	38.55	38.67	38.79	38.91	39.03
Short Circuit Current- $I_{sc}(A)$	13.57	13.58	13.60	13.61	13.62
Module Efficiency (%)	22.0	22.3	22.5	22.8	23.0

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

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)

Maximum Power- $P_{MAX}(Wp)$	465	470	475	480	485
Maximum Power Voltage- $V_{MPP}(V)$	32.88	33.13	33.38	33.43	33.70
Maximum Power Current- $I_{MPP}(A)$	14.12	14.18	14.24	14.30	14.36
Open Circuit Voltage- $V_{oc}(V)$	38.84	39.11	39.38	39.65	39.92
Short Circuit Current- $I_{sc}(A)$	14.85	14.9	14.95	15.0	15.05
Irradiation Ratio (rear/front)	10%				

*Bifaciality= $P_{max, rear}/Rated, front$

MECHANICAL DATA

Solar Cells	Mono-16BB
Dimensions	1762*1134*30mm
Weight	22 kgs
Front Glass / Back Glass	2.0mm / 2.0mm
Backsheet	Black
Frame	Black Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	Photovoltaic Technology Cable 4.0 mm ² , Portrait: N 300mm/P 300mm Landscape: N 1400mm/P 1400mm (Opt)
Wind/Snow Load	4000 Pa/6000 Pa*
Connector	QC 4.10-351 / MC4-EVO2A

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	45±2 C
Temperature Coefficient of P_{MAX}	-0.30%/C
Temperature Coefficient of V_{oc}	-0.26%/C
Temperature Coefficient of I_{sc}	0.046%/C

MAXIMUM RATINGS

Operational Temperature	-40~+85 C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A
Bifaciality*	80%±10%

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

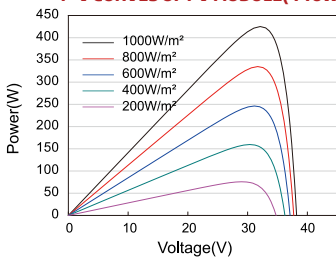
15 years Product Warranty
30 years Linear Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per pallet: 36 pieces
Modules per 40HQ container: 936 pieces

P-V CURVES OF PV MODULE(440W)



I-V CURVES OF PV MODULE(440W)

