SERAPHIM®

SHIFTING · THE FUTURE

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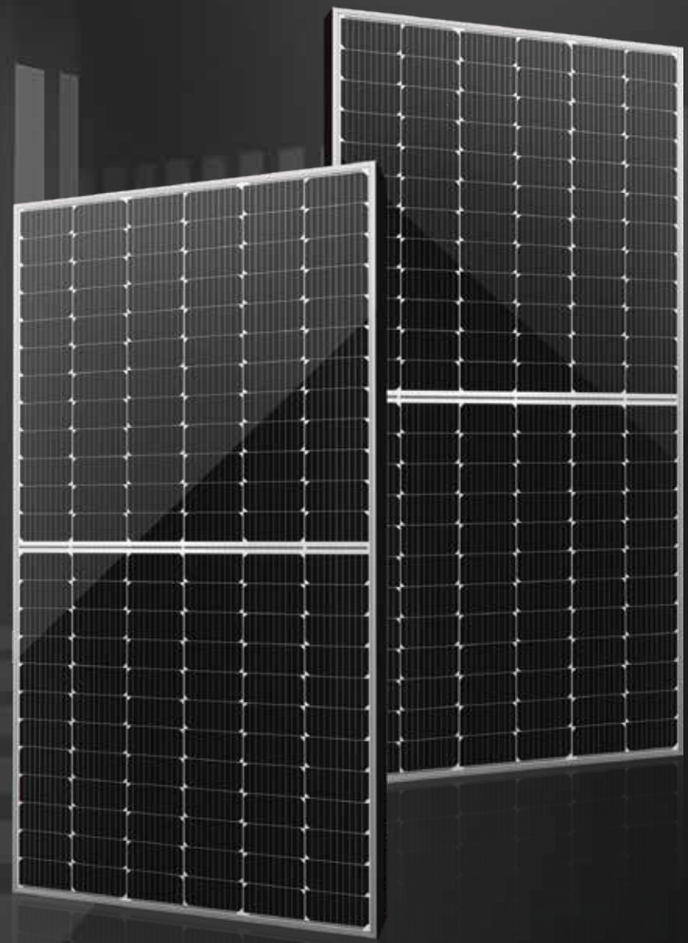
SERAPHIM®

BIFACIAL 166 HALF-CELL SERIES

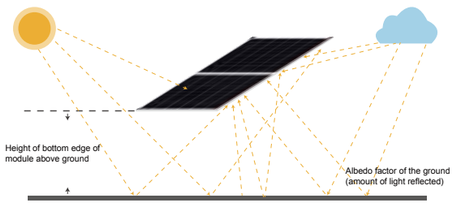
Multiple Upgrades Were Forged Into One



430W–445W

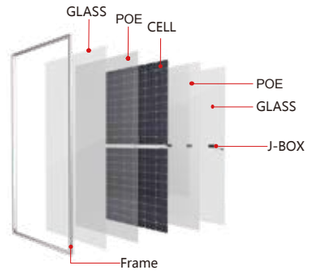
Maximum Power Output

Uses reflected and scattered light to increase energy generation by an additional 10-30%.



Upgraded Module Design

A lighter, 2.0mm tempered AR-coated glass was selected to maintain the same snow and wind load as standard modules, while reducing transportation costs and installation difficulty.



Warranty

15 YEARS Guarantee on product material and workmanship

30 YEARS linear power output warranty

Certifications

Insurances

PICC

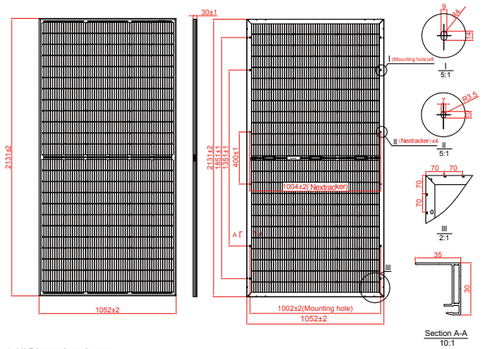
More Benefits

- Backside power gain up to 30%
- Class A fire resistance
- Outstanding performance at low irradiance
- Less mismatch and parallel design reduce shading impact
- Bifaciality up to 70%±5%
- Significantly lower LCOE, and save BoS cost

Perfect For Highly— Reflective Project Sites

WATER | SANDY | GRASSLAND | WHITE PAINTED GROUND

Technical Drawing



* All Dimensions in mm

* The above drawing is a graphical representation of the product. For engineering quality drawings please contact SERAPHIM.

Mechanical Specifications

External Dimension	2131 x 1052 x 30mm
Weight	29.0kg
Solar Cells	PERC Mono 166 x 83 mm (144pcs)
Front / Back Glass	2.0mm AR coating semi-tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0 mm², Portrait:255mm(+)/355mm(-);Landscape:1300mm
Connector	MC4 Compatible

Packing Configuration

Container	40'HQ
Pieces per Pallet	30
Pallets per Container	20
Pieces per Container	600

Module Type	SRP-430-BMA-BG		SRP-435-BMA-BG		SRP-440-BMA-BG		SRP-445-BMA-BG	
STC	Front	Back	Front	Back	Front	Back	Front	Back
Maximum Power -P_{mp} (W)	430	320	435	324	440	328	445	332
Open Circuit Voltage -V_{oc} (V)	49.4	46.1	49.6	45.3	49.7	45.4	49.9	45.6
Short Circuit Current -I_{sc} (A)	11.11	8.95	11.18	9.02	11.27	9.10	11.34	9.17
Maximum Power Voltage -V_{mp} (V)	41.1	38.0	41.3	38.2	41.4	38.3	41.6	38.5
Maximum Power Current -I_{mp} (A)	10.47	8.43	10.54	8.49	10.63	8.57	10.70	8.63
Module Efficiency STC-η_m (%)	19.18		19.40		19.63		19.85	
Power Tolerance（W）	(0，+4.99)							
Pmax Temperature Coefficient	-0.36 %/°C							
Voc Temperature Coefficient	-0.28 %/°C							
Isc Temperature Coefficient	+0.05 %/°C							

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5

Rear Side Power Gain(SRP-435-BMA-BG)

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P_{mp} (W)	479	500	522	544	566
Open Circuit Voltage -V_{oc} (V)	49.6	49.6	49.6	49.6	49.6
Short Circuit Current -I_{sc} (A)	12.29	12.86	13.41	13.97	14.53
Maximum Power Voltage -V_{mp} (V)	41.3	41.3	41.3	41.3	41.3
Maximum Power Current -I_{mp} (A)	11.59	12.12	12.64	13.17	13.70

Application Conditions

Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	20A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	70%±5%
Mechanical Load	Front side 5400Pa/ Rear side 2400Pa

I-V Curve