

# SIII SERIES

Multiple upgrades were forged into one







## 430-445w



### ● SIII SERIES

Seraphim redefined the high-efficiency module series by integrating 166mm silicon wafers with multi-busbar and half-cut cell technologies. Seraphim panel combined creative technology effectively and extremely improved the module efficiency and power output.

### ● KEY FEATURES

-  Less mismatch to get more power
-  Less power loss by minimizing the shading impact
-  Competitive low light performance
-  3 times EL test to ensure best quality
-  Ideal choice for utility and commercial scale projects by reduced BOS and improve ROI.
-  Outstanding reliability proven by PVEL for stringent environment condition :  
·2400pa wind load and 5400pa snow load.

### ● QUALITY SYSTEM

ISO19001 / ISO14001 / OHSAS18001

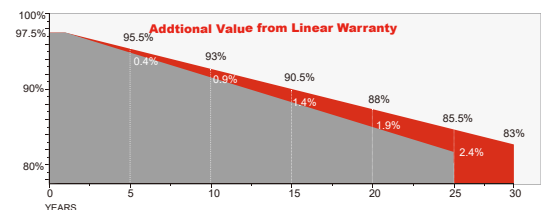
### ● PRODUCT CERTIFICATION



### ● INSURANCE



### ● WARRANTY



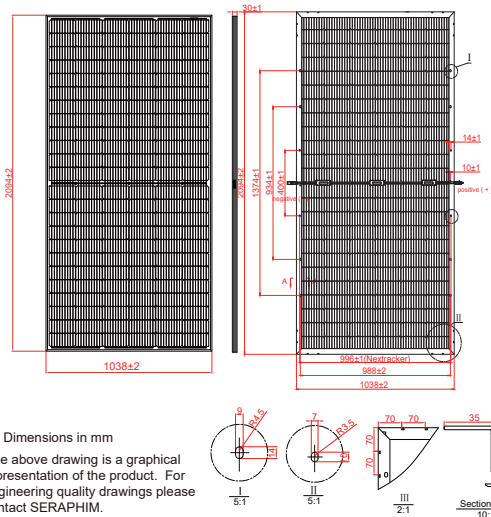
Guarantee on product material and workmanship



linear power output warranty



### 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	2094 x 1038 x 30mm
Weight	28.0kg
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 mm <sup>2</sup> , Portrait:255mm(+)/355mm(-);Landscape:1200mm
Connector	Genuine MC4 / TT02 / 05-6 / 05-8

### Packing Configuration

Container	40'HQ
Pieces per Pallet	32
Pallets per Container	22
Pieces per Container	704

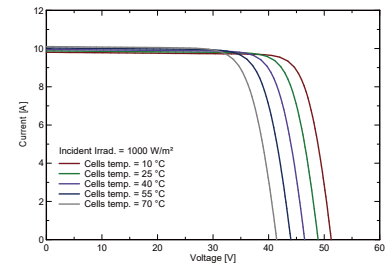
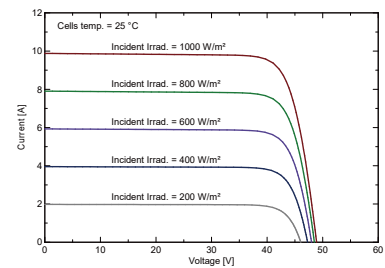
Module Type	SRP-430-BMA-BG		SRP-435-BMA-BG		SRP-440-BMA-BG		SRP-445-BMA-BG	
	Front	Back	Front	Back	Front	Back	Front	Back
STC								
Maximum Power -P <sub>mp</sub> (W)	430	320	435	324	440	328	445	332
Open Circuit Voltage -V <sub>oc</sub> (V)	49.4	45.1	49.6	45.3	49.7	45.4	49.9	45.6
Short Circuit Current -I <sub>sc</sub> (A)	11.11	8.95	11.18	9.02	11.27	9.10	11.34	9.17
Maximum Power Voltage -V <sub>mp</sub> (V)	41.1	38.0	41.3	38.2	41.4	38.3	41.6	38.5
Maximum Power Current -I <sub>mp</sub> (A)	10.47	8.43	10.54	8.49	10.63	8.57	10.70	8.63
Module Efficiency STC-η <sub>m</sub> (%)	19.78		20.01		20.24		20.47	
Power Tolerance (W)	(0, +3%)							
Pmax Temperature Coefficient	-0.35 %/°C							
Voc Temperature Coefficient	-0.28 %/°C							
Isc Temperature Coefficient	+0.05 %/°C							

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25°C AM=1.5 Power measurement tolerance: +/-3%;Voltage measurement tolerance: +/-2%;Current measurement tolerance: +/-4%  
 NOCT: Irradiance 800 W/m<sup>2</sup> ambient temperature 20°C wind speed :1m/s Power measurement tolerance: +/-3%;Voltage measurement tolerance: +/-2%;Current measurement tolerance: +/-4%

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

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P <sub>mp</sub> (W)	479	500	522	544	566
Open Circuit Voltage -V <sub>oc</sub> (V)	49.6	49.6	49.6	49.6	49.6
Short Circuit Current -I <sub>sc</sub> (A)	12.29	12.86	13.41	13.97	14.53
Maximum Power Voltage -V <sub>mp</sub> (V)	41.3	41.3	41.3	41.3	41.3
Maximum Power Current -I <sub>mp</sub> (A)	11.59	12.12	12.64	13.17	13.70

### I-V Curve



### Application Conditions

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

Specifications are subject to change without further notification SRP-DS-EN-2020T1228 © Copyright 2020 Seraphim



**SERAPHIM SOLAR SYSTEM CO., LTD**

Add: No.1-2, HengyaoRd, HenglinTown, Wujin District, 213000, Changzhou, China  
 Tel: +86-519-69699879 Fax: +86-519-88786181 Email: info@seraphim-energy.com