

SIV SERIES

Small Changes, Big Accomplishments







490-505W



● SIV SERIES

Seraphim redefined the high-efficiency module series by integrating 182mm 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 improved ROI
-  Outstanding reliability proven by PVEL for stringent environment condition:
 - Sand, acid, salt and hail stones
 - 2400 Pa wind load and 5400 Pa snow load
 - Anti-PID

● QUALITY SYSTEM

ISO9001 / ISO14001 / ISO45001

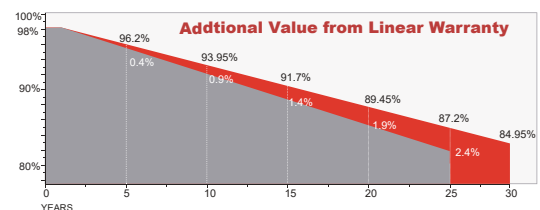
● PRODUCT CERTIFICATION



● INSURANCE

PICC

● WARRANTY



Guarantee on product material and workmanship



Linear power output warranty



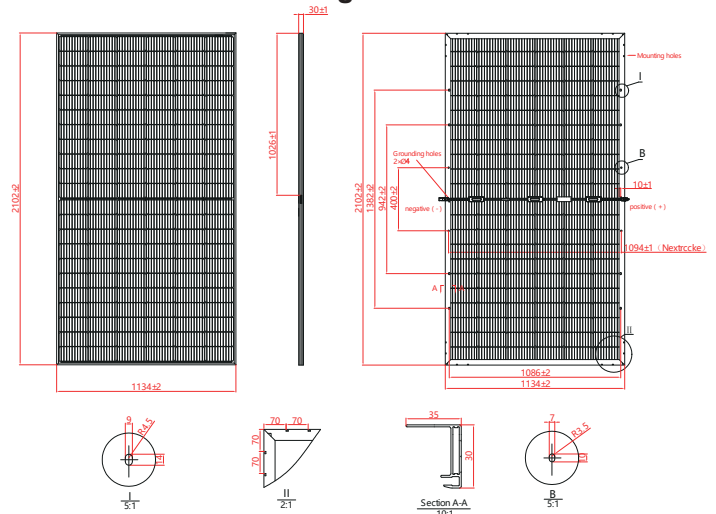
Mechanical Specifications

External Dimension	2102 x 1134 x 30 mm
Weight	30.0 kg
Solar Cells	PERC Mono crystalline(132pcs)
Front / Back Glass	2.0mm AR coating semi-tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm ² , 250mm(+)/350mm(-) or Customized Length
Connector	Staubli MC4 EVO2/Cuangda TT02 / Renhe 05-8
Fire Safety Class	Class A

Packing Configuration

Container	20'GP	40'HQ
Pieces per Pallet	32	32
Pallets per Container	5	22
Pieces per Container	160	704

Technical drawing



Electrical Characteristics

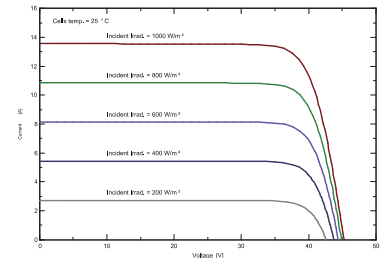
Module Type	SRP-490-BMC-BG			SRP-495-BMC-BG			SRP-500-BMC-BG			SRP-505-BMC-BG		
	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC
Maximum Power $-P_{mp}$ (W)	490	368	343	495	372	347	500	375	350	505	378	353
Open Circuit Voltage $-V_{oc}$ (V)	45.32	42.31	45.30	45.43	42.41	45.41	45.53	42.51	45.51	45.63	42.60	45.61
Short Circuit Current $-I_{sc}$ (A)	13.68	11.06	9.64	13.79	11.14	9.72	13.89	11.22	9.79	13.99	11.31	9.86
Maximum Power Voltage $-V_{mp}$ (V)	37.59	35.02	37.60	37.70	35.11	37.72	37.78	35.17	37.79	37.87	35.27	37.88
Maximum Power Current $-I_{mp}$ (A)	13.05	10.50	9.13	13.15	10.58	9.20	13.24	10.66	9.27	13.34	10.73	9.34
Module Efficiency STC- η_m (%)	20.56			20.77			20.98			21.19		
Power Tolerance (W)							(0, +4.99)					
Pmax Temperature Coefficient							-0.35 %/°C					
Voc Temperature Coefficient							-0.27 %/°C					
Isc Temperature Coefficient							+0.05 %/°C					

STC: Irradiance 1000 W/m²; module temperature 25°C AM=1.5 Power measurement tolerance: +/-3%; Voltage measurement tolerance: +/-2%; Current measurement tolerance: +/-4%
 NOCT: Irradiance 800 W/m²; 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-490-BMC-BG)

Power Gain	10%	15%	20%	25%	30%
Maximum Power $-P_{mp}$ (W)	539	564	588	613	637
Open Circuit Voltage $-V_{oc}$ (V)	45.32	45.32	45.32	45.32	45.32
Short Circuit Current $-I_{sc}$ (A)	15.05	15.73	16.42	17.10	17.78
Maximum Power Voltage $-V_{mp}$ (V)	37.59	37.59	37.59	37.59	37.59
Maximum Power Current $-I_{mp}$ (A)	14.36	15.01	15.66	16.31	16.97

I-V Curve



Application Conditions

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	70%±10%
Mechanical Load	Front side 5400 Pa / Back side 2400 Pa

