

SIV SERIES

Small Changes, Big Accomplishments







400-415W



● 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
-  **PVEL** 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

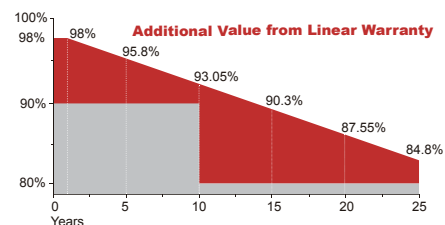
● PRODUCT CERTIFICATION



● INSURANCE

PICC

● WARRANTY



Guarantee on product material and workmanship



Linear power output warranty

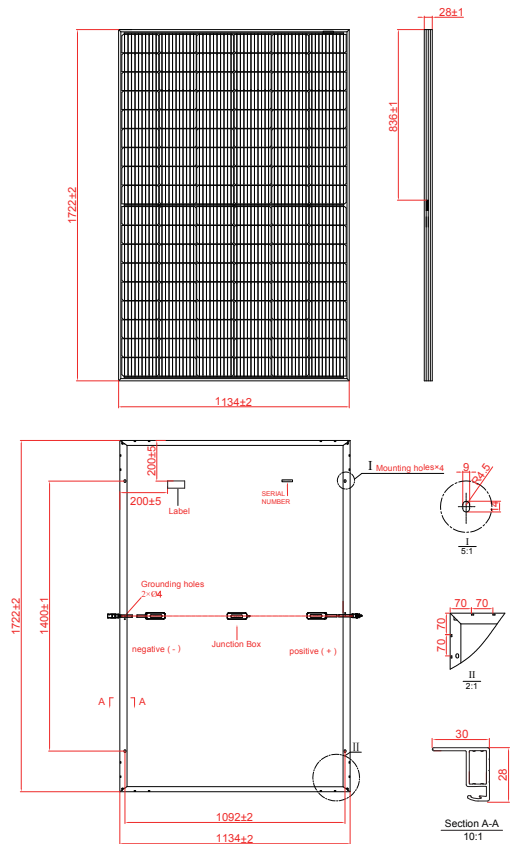
*Subject to the terms and conditions contained in the applicable Seraphim Solar System Co., Ltd. Warranty Statement. This 25-year product warranty is only applicable for products installed and operating on residential rooftops in certain regions.



Electrical Characteristics

Module Type	SRP-400-BMD-HV		SRP-405-BMD-HV		SRP-410-BMD-HV		SRP-415-BMD-HV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power at STC (Pmp)	400	301	405	304	410	308	415	311
Open Circuit Voltage (Voc)	37.12	34.64	37.22	34.73	37.32	34.81	37.42	34.90
Short Circuit Current (Isc)	13.60	10.99	13.70	11.07	13.80	11.15	13.90	11.23
Maximum Power Voltage (Vmp)	30.81	28.82	30.93	28.91	31.05	29.05	31.16	29.19
Maximum Power Current (Imp)	12.99	10.44	13.10	10.51	13.21	10.59	13.32	10.66
Module Efficiency at STC(ηm)	20.48		20.74		21.00		21.25	
Power Tolerance	(0, +4.99)							
Maximum System Voltage	1500V DC							
Maximum Series Fuse Rating	25 A							

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5
Power measurement tolerance: +/-3%



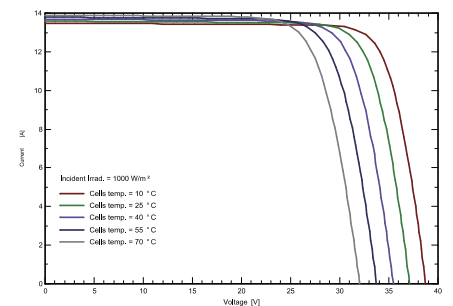
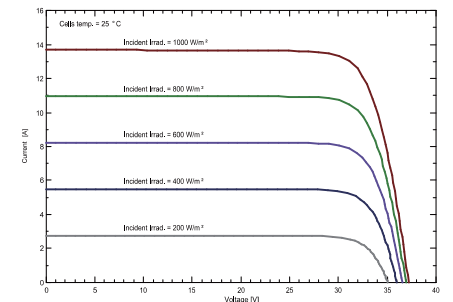
Temperature Characteristics

Pmax Temperature Coefficient	-0.34 %/°C
Voc Temperature Coefficient	-0.26 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature(NOCT)	45±2 °C

Mechanical Specifications

External Dimensions	1722 x 1134 x 28 mm
Weight	19.0 kg
Solar Cells	PERC Mono (108 pcs)
Front Glass	3.2mm AR coating tempered glass, low iron
Frame	Black anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm ² , 250mm(+)/350mm(-) or Customized Length
Mechanical Load	Front side 5400Pa/ Rear side 2400Pa

I-V Curve



Packing Configuration

	1722 x 1134 x 28 mm	
Container	20'GP	40'HQ
Pieces per Pallet	39	39
Pallets per Container	6	26
Pieces per Container	234	1014

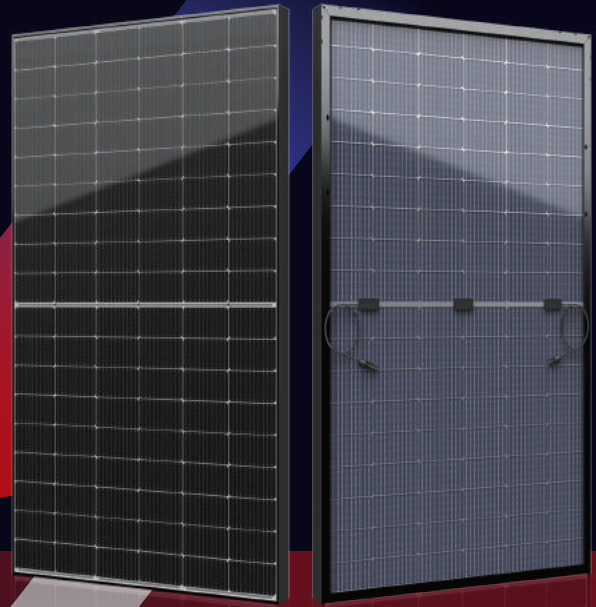
For details, please consult SERAPHIM.



SIV SERIES

Small Changes, Big Accomplishments







400-415W



● 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

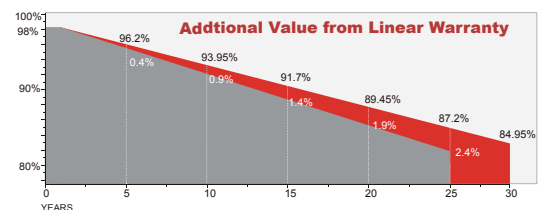
● PRODUCT CERTIFICATION



● INSURANCE



● WARRANTY



Guarantee on product material and workmanship



Linear power output warranty

*Subject to the terms and conditions contained in the applicable Seraphim Solar System Co., Ltd. Warranty Statement. This 30-year product warranty is only applicable for products installed and operating on residential rooftops in certain regions.



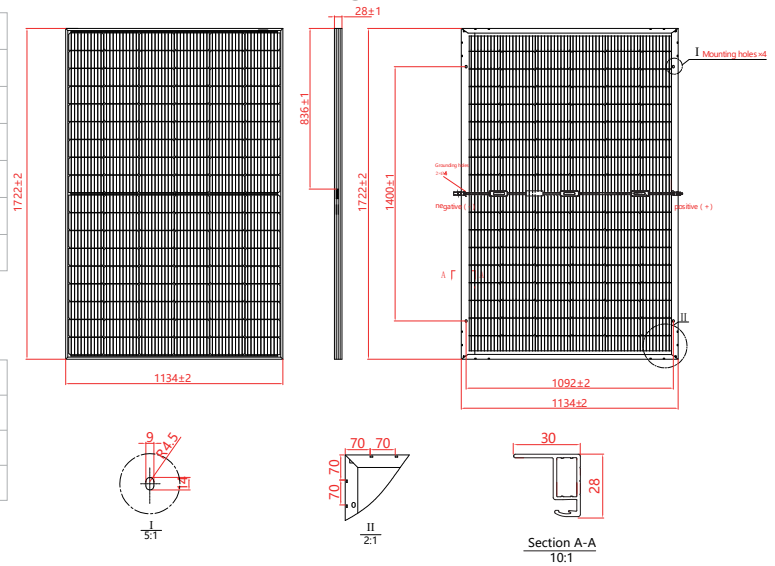
Mechanical Specifications

External Dimension	1722 x 1134 x 28 mm
Weight	18.5 kg
Solar Cells	PERC Mono crystalline(108 pcs)
Front / Back Glass	1.6mm AR coating semi-tempered glass, low iron
Frame	Black anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm ² , 250mm(+)/350mm(-) or Customized Length

Packing Configuration

Container	20'GP	40'HQ
Pieces per Pallet	39	39
Pallets per Container	6	26
Pieces per Container	234	1014

Technical drawing



Electrical Characteristics

Module Type	SRP-400-BMD-BG			SRP-405-BMD-BG			SRP-410-BMD-BG			SRP-415-BMD-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)	400	301	280	405	304	284	410	308	287	415	311	291
Open Circuit Voltage -V _{oc} (V)	37.12	34.64	37.10	37.22	34.73	37.20	37.32	34.81	37.30	37.42	34.90	37.40
Short Circuit Current -I _{sc} (A)	13.60	10.99	9.59	13.70	11.07	9.66	13.80	11.15	9.73	13.90	11.23	9.80
Maximum Power Voltage -V _{mp} (V)	30.81	28.82	30.80	30.93	28.91	30.98	31.05	29.05	31.03	31.16	29.19	31.17
Maximum Power Current -I _{mp} (A)	12.99	10.44	9.10	13.10	10.51	9.17	13.21	10.59	9.25	13.32	10.66	9.34
Module Efficiency STC-η _m (%)	20.48			20.74			21.00			21.25		
Power Tolerance (W)							(0, +4.99)					
Pmax Temperature Coefficient							-0.34 %/°C					
Voc Temperature Coefficient							-0.26 %/°C					
Isc Temperature Coefficient							+0.05 %/°C					

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5
Power measurement tolerance: +/-3%

Rear Side Power Gain(SRP-410-BMD-BG)

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P _{mp} (W)	451	472	492	513	533
Open Circuit Voltage -V _{oc} (V)	37.22	37.22	37.22	37.22	37.22
Short Circuit Current -I _{sc} (A)	15.18	15.87	16.56	17.25	17.94
Maximum Power Voltage -V _{mp} (V)	31.05	31.05	31.05	31.05	31.05
Maximum Power Current -I _{mp} (A)	14.53	15.19	15.85	16.51	17.17

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

I-V Curve

