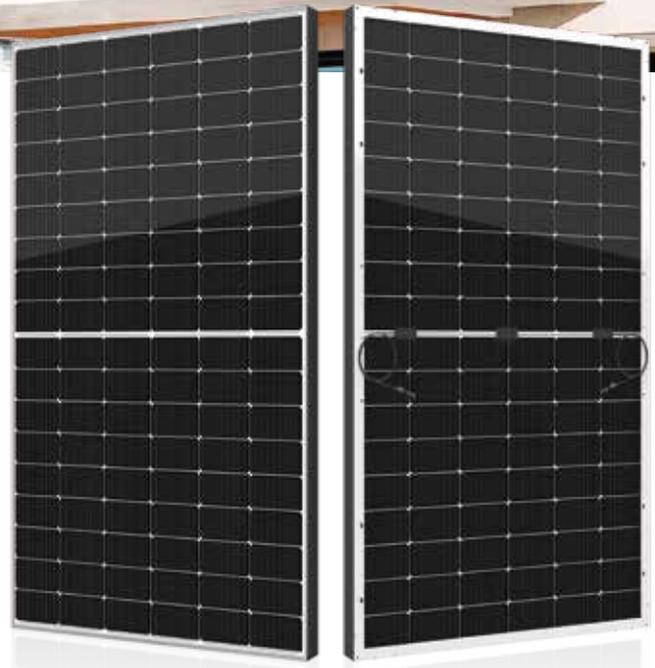


Nebula

425-450W

Lightweight high efficiency bifacial modules



TOPCon 182mm

● TOPCon MODULE ADVANTAGE

-  Multi-Busbar technology
-  Superior load capacity
-  High module efficiency
-  Excellent low-light performance
-  Lower annual attenuation
Longer warranty
-  Low BOS and LCOE
-  Reduce hot spot effect
-  Higher bifaciality

● QUALITY SYSTEM

ISO9001 / ISO14001 / ISO45001

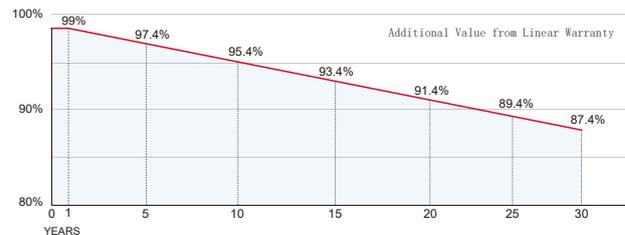
● PRODUCT CERTIFICATION



● INSURANCE



● WARRANTY



15 YEARS Guarantee on product material and workmanship

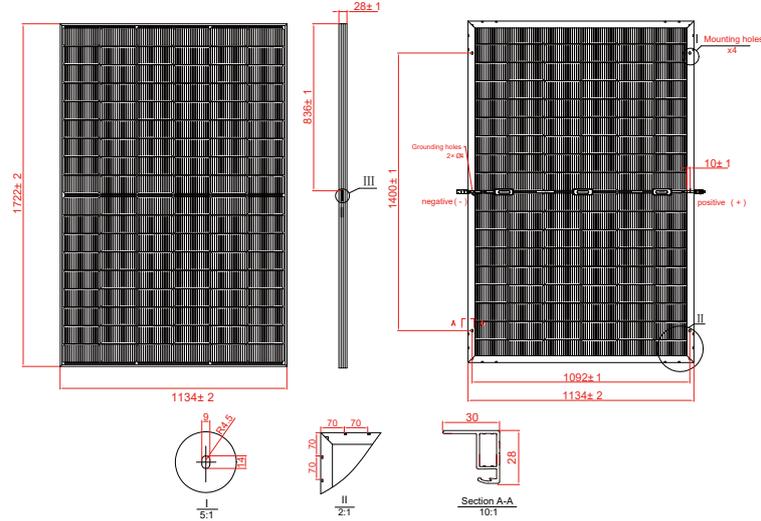
30 YEARS Linear power output warranty



Mechanical Specifications

External Dimension	1722 x 1134 x 28 mm
Weight	21.0 kg
Solar Cells	182N-TOPCon (108pcs)
Front / Back Glass	1.6mm 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

Technical drawing



Packing Configuration

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

Electrical Characteristics

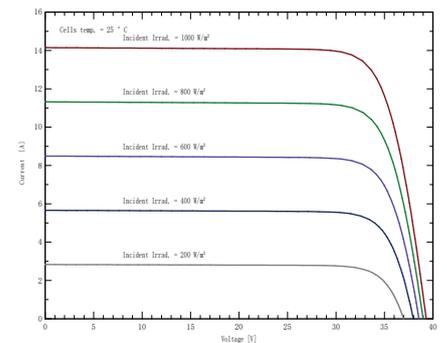
Module Type	SRP-425-BTD-BG		SRP-430-BTD-BG		SRP-435-BTD-BG		SRP-440-BTD-BG		SRP-445-BTD-BG		SRP-450-BTD-BG	
	Front STC	Front BNP1										
Maximum Power $-P_{mp}$ (W)	425	466	430	471	435	477	440	482	445	488	450	493
Open Circuit Voltage $-V_{oc}$ (V)	38.70	38.78	38.90	38.98	39.10	39.18	39.30	39.38	39.50	39.58	39.70	39.78
Short Circuit Current $-I_{sc}$ (A)	13.91	15.25	13.99	15.33	14.07	15.42	14.15	15.51	14.23	15.60	14.31	15.68
Maximum Power Voltage $-V_{mp}$ (V)	32.10	32.18	32.30	32.38	32.50	32.58	32.70	32.78	32.90	32.98	33.10	33.18
Maximum Power Current $-I_{mp}$ (A)	13.24	14.47	13.32	14.55	13.39	14.63	13.47	14.71	13.54	14.79	13.61	14.86
Module Efficiency STC $-η_m$ (%)	21.76		22.02		22.28		22.53		22.79		23.04	
Power Tolerance (W)	(0, +4.99)											

STC: Irradiance 1000 W/m² module temperature 25° C AM=1.5 Power measurement tolerance: +/-3%; Voltage measurement tolerance: +/-3%; Current measurement tolerance: +/-4%
BNP1: front 1000 W/m² rear 135 W/m² Power measurement tolerance: +/-3%; Voltage measurement tolerance: +/-3%; Current measurement tolerance: +/-4%

Rear Side Power Gain (SRP-440-BTD-BG)

Power Gain	10%	15%	20%	25%	30%
Maximum Power $-P_{mp}$ (W)	484	506	528	550	572
Open Circuit Voltage $-V_{oc}$ (V)	39.30	39.30	39.30	39.30	39.30
Short Circuit Current $-I_{sc}$ (A)	15.57	16.27	16.98	17.69	18.40
Maximum Power Voltage $-V_{mp}$ (V)	32.70	32.70	32.70	32.70	32.70
Maximum Power Current $-I_{mp}$ (A)	14.82	15.49	16.16	16.84	17.51

I-V Curve

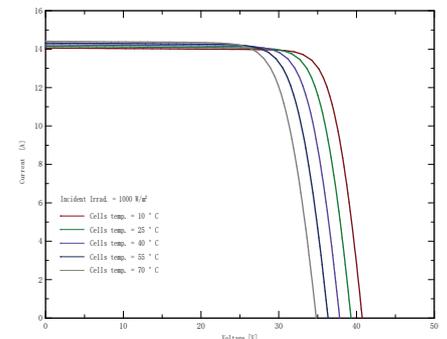


Temperature Ratings

Pmax Temperature Coefficient	-0.29 %/° C
Voc Temperature Coefficient	-0.25 %/° C
Isc Temperature Coefficient	+0.046 %/° C

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	80%±5%
Mechanical Load	Front side 5400 Pa / Back side 2400 Pa



Specifications are subject to change without further notification SRP-DS-EN-2026V1.0 © Copyright 2026 Seraphim



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