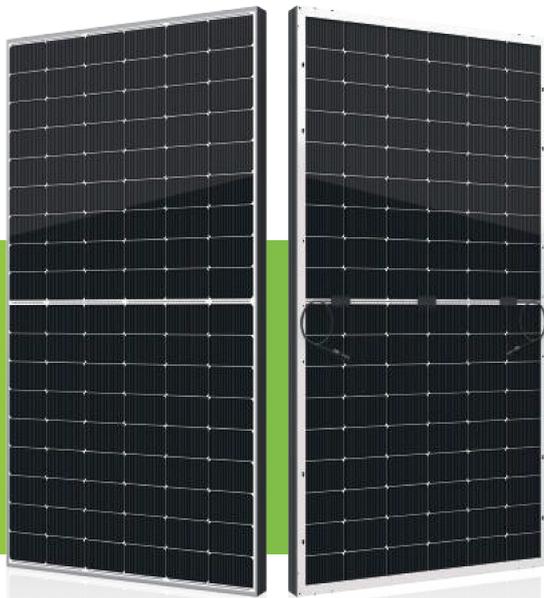


ELNSM54M-HC-HV-N Series



MBB HC BIFACIAL MONOCRYSTALLINE PV MODULE 425-440 W



Bifacial_N-TYPE Series

Sirius redefined the high-efficiency module series by integrating 182mm silicon wafers with multi-busbar and half-cutcell technologies. Sirius combined creative technology with 182mm_N Type module. This caused 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.



SMBB Technology
Better light trapping and current collection to improve module power output and reliability.



In stringent environment condition :
• Sand, acid, salt and hail stones,
• 2400pa wind load and 5400pa snow load.
• PID FREE



3 times EL test to ensure best quality.

QUALITY SYSTEM



ISO 9001:2015, ISO 14001:2015, ISO 45001: 2018, ISO 27001:2013, ISO 10002: 2018, ISO 26000:2021, ISO 37001:2016, ISO 50001:2018

PRODUCT CERTIFICATION



TS EN 61215, TS EN 61730
IEC 61215, IEC 61730, IEC 62804 (PID FREE)
UL 61730-1, UL 61730-2

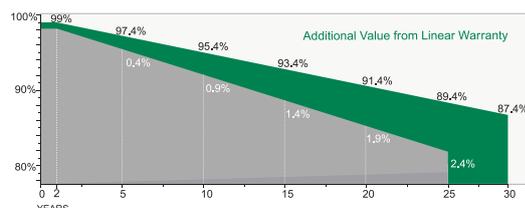
WARRANTY



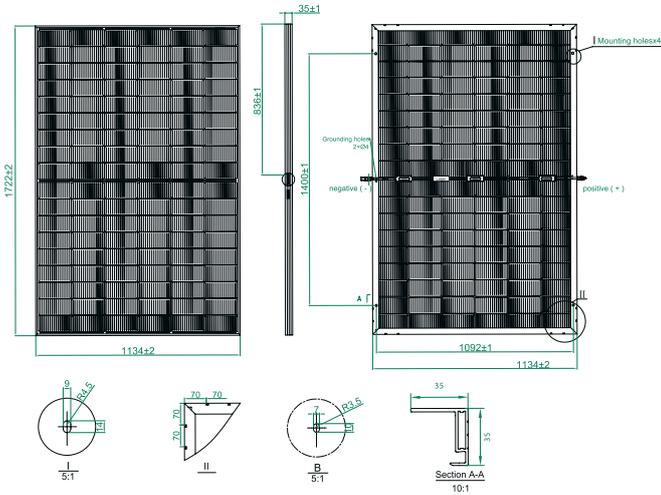
Guarantee On Product



Linear Power Output Warranty



ELNSM54M-HC-HV-N Series



MECHANICAL SPECIFICATIONS

External Dimension	1722 x 1134 x 35 mm
Weight	21 kg
Solar Cells	Topcon(108 pcs)
Glass	3.2mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables*	4.0mm ² , 350mm(+)/350mm(-) or Customized Length
*Output cable lengths should be specified at the time of order.	

PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	5	24
Pieces per Container	155	744

* 31+4 pieces per pallet is the special package which only suits for container transport.

Module Type	ELNSM54M-HC-HV-N-425			ELNSM54M-HC-HV-N-430			ELNSM54M-HC-HV-N-435			ELNSM54M-HC-HV-N-440		
	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)	425	320	340	430	324	344	435	328	348	440	332	352
Open Circuit Voltage -V _{oc} (V)	38.70V	36.77V	38.68V	38.90V	36.96V	38.88V	39.10V	37.15V	39.08V	39.30V	37.34V	39.28V
Short Circuit Current -I _{sc} (A)	13.91A	11.13A	11.13A	13.99A	11.19A	11.19A	14.07A	11.26A	11.26A	14.15A	11.32A	11.32A
Maximum Power Voltage -V _{mp} (V)	32.10V	30.21V	32.08V	32.30V	30.41V	32.28V	32.50V	30.62V	32.48V	32.70V	32.82V	32.68V
Maximum Power Current -I _{mp} (A)	13.24A	10.59A	10.60A	13.32A	10.66A	10.66A	13.39A	10.71A	10.72A	13.47A	10.77A	10.78A
Module Efficiency STC-η _m (%)	21.76%			22.02%			22.28%			22.53%		
Power Tolerance(W)	(0, +4.99)											
Pmax Temperature Coefficient	-0.29 %/°C											
Voc Temperature Coefficient	-0.25 %/°C											
Isc Temperature Coefficient	+0.046 %/°C											
* Measurement Tolerance +/- 3%												
STC: Irradiance 1000 W/m ² module temperature 25°C AM=1.5												
NOCT: Irradiance 800W / m ² , Ambient Temperature 20 °C, AM = 1.5, Wind Speed 1m / s												

REAR SIDE POWER GAIN

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

APPLICATION CONDITIONS

Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	25A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	80%±5%
Mechanical Load	Front side 5400Pa/ Rear side 2400Pa

I-V CURVE

