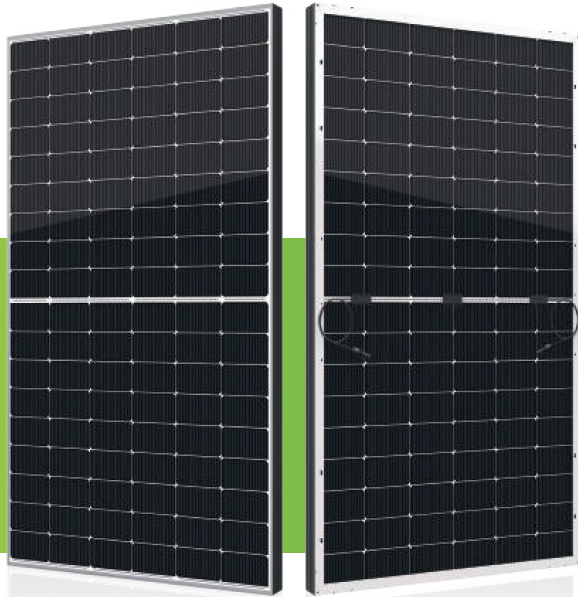


ELNSM54M-HC-HV-N Series



**MBB HC BIFACIAL
PV MODULE
420-435W**



BiFacial_N-TYPE Series

Elin 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 10002:2004

PRODUCT CERTIFICATION



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

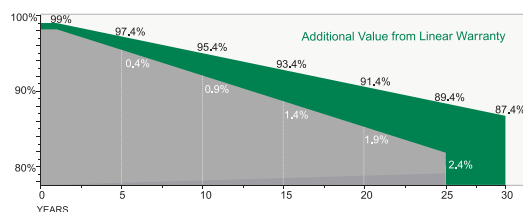
WARRANTY



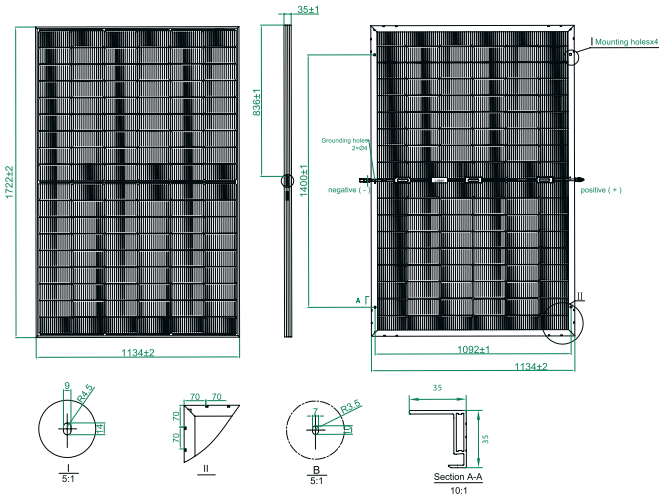
15 YEARS Guarantee On Product



30 YEARS Linear Power Output Warranty



ELNSM54M-HC-HV-N Series



MECHANICAL SPECIFICATIONS

External Dimension	1722 x 1134 x 35 mm
Weight	19.0 kg
Solar Cells	Topcon(108 pcs)
Front / Back Glass	3.2mm 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
*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	20
Pieces per Container	155	620

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

Module Type	ELNSM54M-HC-HV-N-420			ELNSM54M-HC-HV-N-425			ELNSM54M-HC-HV-N-430			ELNSM54M-HC-HV-N-435		
	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)	420	316	336	425	320	340	430	324	344	435	328	348
Maximum Power Voltage -V _{mp} (V)	31.90V	29.99V	31.88V	32.10V	30.21V	32.08V	32.30V	30.41V	32.28V	32.50V	30.62V	32.48V
Maximum Power Current -I _{mp} (A)	13.17A	10.54A	10.54A	13.24A	10.59A	10.60A	13.32A	10.66A	10.66A	13.39A	10.71A	10.72A
Open Circuit Voltage -V _{oc} (V)	38.50V	36.58V	38.48V	38.70V	36.77V	38.68V	38.90V	36.96V	38.88V	39.10V	37.15V	39.08V
Short Circuit Current -I _{sc} (A)	13.83A	11.06A	11.06A	13.91A	11.13A	11.13A	13.99A	11.19A	11.19A	14.07A	11.26A	11.26A
Module Efficiency STC-η _m (%)	21.51%			21.76%			22.02%			22.28%		
Power Tolerance(W)	(0, +4.99)											
Pmax Temperature Coefficient	-0.30 %/°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 ELNSM54M-HC-HV-N-420

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P _{mp} (W)	462	483	504	525	546
Open Circuit Voltage -V _{oc} (V)	38.50	38.50	38.50	38.50	38.50
Short Circuit Current -I _{sc} (A)	15.21	15.90	16.60	17.29	18.00
Maximum Power Voltage -V _{mp} (V)	31.90	31.90	31.90	31.90	31.90
Maximum Power Current -I _{mp} (A)	14.49	15.15	15.80	16.46	17.12

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

ELiN A.Ş. reserves the right to change the technical specifications and design data in the catalog without prior notice.
Made in Türkiye.

I-V CURVE

