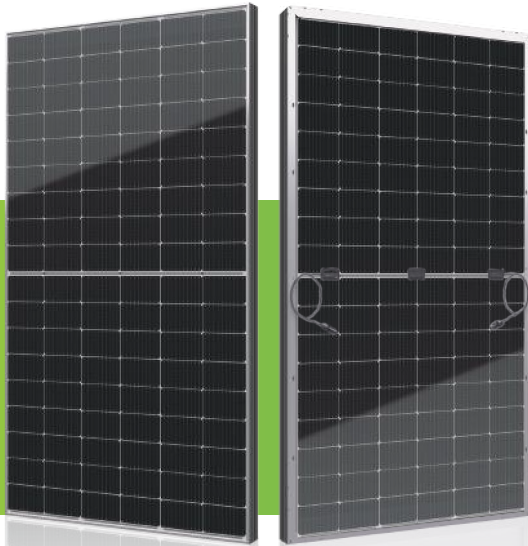


**ELNSM54M-HC-HV Series**

**MBB HC BIFACIAL  
MONOCRYSTALLINE  
PV MODULE  
400-415W**



**Bifacial Series**

Elin redefined the high efficiency module series by combining 182 mm silicon wafer, multi busbar and Halfcell technology. With the Sirius 182M, it has effectively combined technology, extremely improving 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



Ideal choice for utility and commercial scale projects by reduced BOS and improve ROI.



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

**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

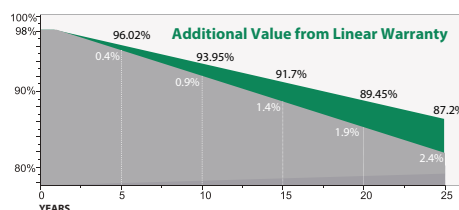
**WARRANTY**



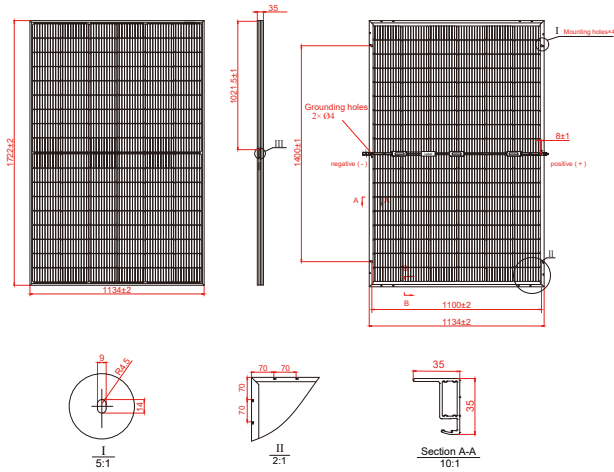
**12 YEARS** Guarantee On Product



**25 YEARS** Linear Power Output Warranty



## ELNSM54M-HC-HV Series



### MECHANICAL SPECIFICATIONS

External Dimension	1722 x 1134 x 35 mm
Weight	19 kg
Solar Cells	PERC Mono Kristal(120 pcs)
Front Glass	3.2mm AR kaplamalı tamperli cam
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables*	4.0mm <sup>2</sup> , 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-400-HC-HV			ELNSM54M-405-HC-HV			ELNSM54M-410-HC-HV			ELNSM54M-415-HC-HV		
	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 <sub>mp</sub> (W)	400	301	280	405	304	284	410	308	287	415	311	291
Open Circuit Voltage -V <sub>oc</sub> (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 <sub>sc</sub> (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 <sub>mp</sub> (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 <sub>mp</sub> (A)	12.99	10.44	9.10	13.10	10.41	9.17	13.21	10.59	9.25	13.32	10.66	9.34
Module Efficiency STC-η <sub>m</sub> (%)	20.48			20.74			21.00			21.25		
Power Tolerance(W)							(0, 4.99W)					
P <sub>max</sub> Temperature Coefficient							-0.34 %/°C					
V <sub>oc</sub> Temperature Coefficient							-0.26 %/°C					
I <sub>sc</sub> Temperature Coefficient							+0.05 %/°C					

\* Measurement Tolerance +/- 3%

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25°C AM=1.5

NOCT: Irradiance 800W /m<sup>2</sup>, 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 <sub>mp</sub> (W)	451	472	492	513	533
Open Circuit Voltage -V <sub>oc</sub> (V)	37.32	37.32	37.32	37.32	37.32
Short Circuit Current -I <sub>sc</sub> (A)	15.18	15.87	16.56	17.25	17.94
Maximum Power Voltage -V <sub>mp</sub> (V)	31.05	31.05	31.05	31.05	31.05
Maximum Power Current -I <sub>mp</sub> (A)	14.53	15.19	15.85	16.51	17.17

### APPLICATION CONDITIONS

Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	25A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	70%±10%
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

