



## ELNSM54M-HC-N Series

### DC:BS & DC:BS-E & DC:BS-E-J & DC:F-BS-E-J



## MBB HC MONOCRYSTALLINE PV MODULE 435 - 450W

### Sirius 182MM N-Type Series

Sirius redefined the high-efficiency module series by integrating 182mm silicon wafers with multi-busbar and half-cut cell 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



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



Outstanding reliability for stringent environment condition :  

- Sand, acid, salt and hail stones,
- 5400pa wind load and 5400pa snow load.
- PID FREE

## QUALITY SYSTEM

TS EN 61215, TS EN 61730

IEC 61215, IEC61730, IEC 62804 (PID Free)

UL 61730-1, UL 61730-2

ISO 9001:2015 / Quality Management System

ISO 14001:2015 / Environmental Management System

ISO 45001: 2018 / Occupational Health and Safety Management System

ISO 50001:2018 / Energy Management System

ISO 27001:2013 / Information Security Management System

ISO 10002:2018 / Customer Satisfaction Management System

ISO 37001:2016 / Anti-Corruption Management System

ISO 26000:2021 / Social Responsibility Management System

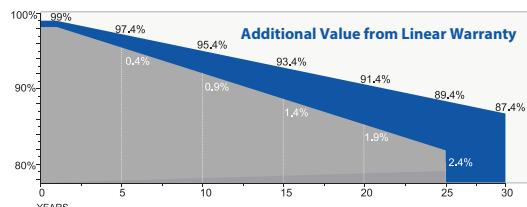
## PRODUCT CERTIFICATION



## WARRANTY

Up to **Guarantee on Product**

**Linear Power Output Warranty**





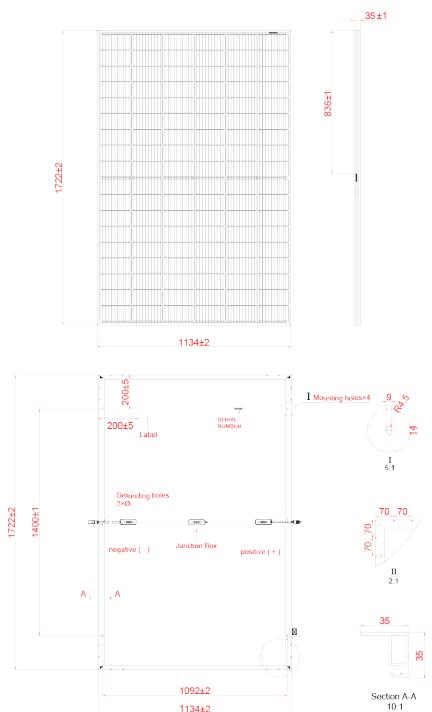
**SIRIUS** 

powered by **ELIN**

## ELNSM54M-HC-N Series

Module Type	ELNSM54M-HC-N 435		ELNSM54M-HC-N 440		ELNSM54M-HC-N 445		ELNSM54M-HC-N 450	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	435	328	440	332	445	336	450	340
Maximum Power Voltage (Vmp)	32.50V	30.62V	32.70V	30.82V	32.90V	31.02V	33.10V	31.22V
Maximum Power Current (Imp)	13.39A	10.71A	13.47A	10.77A	13.54A	10.83A	13.61A	10.89A
Open Circuit Voltage (Voc)	39.10V	37.15V	39.30V	37.34V	39.50V	37.53V	39.70V	37.72V
Short Circuit Current (Isc)	14.07A	11.26A	14.15A	11.32A	14.23A	11.39A	14.31A	11.45A
Module Efficiency STC (%)	22.28%		22.53%		22.79%		23.04%	
Power Tolerance(W)	(0, +4,99 W)							
Maximum System Voltage	1500V DC							
Maximum Series Fuse Rating	25 A							

\* Measurement Tolerance +/- 3%  
 STC: Irradiance 1000W/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



TEMPERATURE CHARACTERISTICS	
Pmax Temperature Coefficient	-0.29 %/°C
Voc Temperature Coefficient	-0.25 %/°C
Isc Temperature Coefficient	+0.046 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	45 ± 2 °C
Fire Performance	Type 1

MECHANICAL SPECIFICATIONS	
External Dimensions	1722 x 1134 x 35 mm (67.80" x 44.65" x 1.38")
Weight	20.5 kg ± 0.5 kg (45.19 lbs ± 1.10 lbs)
Solar Cells	N-Type cells (108 pcs)
Glass	3.2 mm AR coating tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68,3 diodes
Output Cables*	4.0 mm <sup>2</sup> , 1350mm(+) / 1350mm(-) or customized length
Mechanical Load	Front side 5400Pa / Rear side 5400Pa

\* Output cable lengths should be specified at the time of order.

PACKING CONFIGURATION	
Trucks	53ft Truck
Pieces per Pallet	31
Pallets per Trucks	29
Pieces per Trucks	899

ELIN reserves the right to change the technical specifications and design data in the catalog without prior notice.

