SIRIUS PV
powered by ELIN

ELNSM54M-HC Series

MBB HC BIFACIAL MONOCRYSTALLINE PV MODULE 405-415W

ASSEMBLED IN USA

BiFacial Black Series

SIRIUS redefined the high-efficiency module series by integrating 182mm silicon wafers with multi-busbar and half-cut cell technologies. SIRIUS panels effectively combine these technologies to improve module efficiency and power output.

KEY FEATURES

- Less mismatch to get more power
- Our preselected technology features a zero gap cell layout, resulting in module efficiency up to 21%
- 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.
- In stringent environment condition :
  - Sand, acid, salt and 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 10002:2004

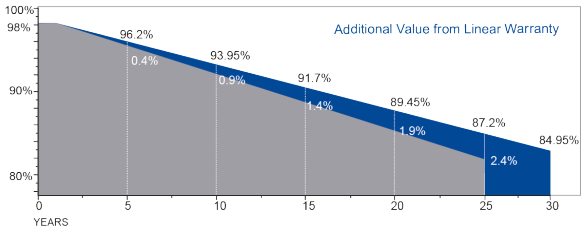
PRODUCT CERTIFICATION

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**

25 YEARS **Linear Power Output Warranty**



* For PERC Monocyrstal bifacial MODULES: less than 2.0% in the first year, thereafter less than 0.45% per year, ending with no less than 87.2% in the 25th year after the Warranty Start Date. The actual output power is calculated as follows·
Actual Power Output (Year=1) ≥ Nominal Power * (1 - 2%) Actual Power Output (Year=N, 2≤N≤25) ≥ Nominal Power *(1 -[2% + 0.45% *(N-1)])

ELNSM54M-HC Series

SIRIUS PV PHOTOVOLTAIC
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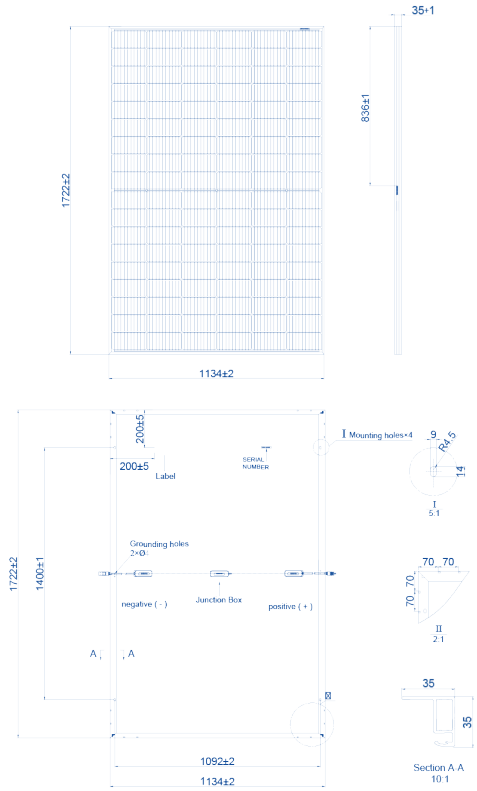
ELECTRICAL SPECIFICATIONS

Module Type	ELNSM54M-HC-405			ELNSM54M-HC-410			ELNSM54M-HC-415		
	FRONT STC	FRONT NOCT	BACK STC	FRONT STC	FRONT NOCT	BACK STC	FRONT STC	FRONT NOCT	BACK STC
Maximum Power (Pmax)	405Wp	304Wp	284Wp	410Wp	308Wp	287Wp	415Wp	311Wp	291Wp
Open Circuit Voltage (Voc)	37.22V	34.73V	37.20V	37.32V	34.81V	37.30V	37.42V	34.90V	37.40V
Short Circuit Current (Isc)	13.70A	11.07A	9.66A	13.80A	11.15A	9.73A	13.90A	11.15A	9.80A
Maximum Power Voltage (Vmp)	30.93V	28.91V	30.98V	31.05V	29.05V	31.03V	31.16V	29.19V	31.17V
Maximum Power Current (Imp)	13.10A	10.51A	9.17A	13.21A	10.59A	9.25A	13.32A	10.66A	9.34A
Module Efficiency STC (%)	20.74%			21.00%			21.25%		
Power Tolerance (W)	(0, +4,99 W)								
Pmax Temperature Coefficient	-0.34 %/°C								
Voc Temperature Coefficient	-0.26 %/°C								
Isc Temperature Coefficient	+0.05 %/°C								

** Measurement Tolerance +/- 3%*
STC: Irradiance 1000W/m2, module temperature 25°C, AM=1.5
NOCT: Irradiance 800W/m2, Ambient Temperature 20°C, AM=1.5, Wind Speed1m/s



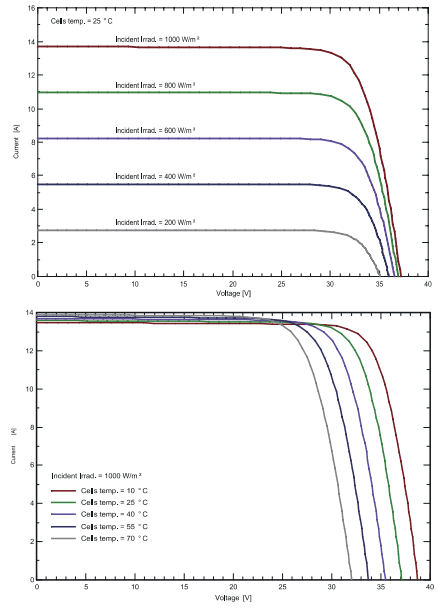
REAR SIDE POWER GAIN ELNSM54M-HC-BF-410

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P_{mp}(W)	451	472	492	513	533
Open Circuit Voltage -V_{oc}(V)	37.32	37.32	37.32	37.32	37.32
Short Circuit Current -I_{sc}(A)	15.18	15.87	16.56	17.25	17.94
Maximum Power Voltage -V_{mp}(V)	31.05	31.05	31.05	31.05	31.05
Maximum Power Current -I_{mp}(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 3600Pa

I-V CURVE



MECHANICAL SPECIFICATIONS

External Dimension	1722 x 1134 x 35 mm (68.80" x 44.65" x 1.38")
Weight	21.5 kg ± 0.5 kg (47.40 lbs ± 1.10 lbs)
Solar Cells	PERC Mono Crystalline (108 pcs)
Front Glass	3.2 mm AR coating semi-tempered glass
Frame	Black anodized aluminium alloy
Junction Box	IP68,3 diodes
Output Cables*	4.0 mm², 1400 mm(+)/1400 mm(-) or Customized Length
Connector	MC4 compatible or staubli (should be specified at the time of order)

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

PACKING CONFIGURATION

	1722x 1134 x 35 mm	
Container		53 ft Truck
Pieces per Pallet		31
Pallets per Container		29
Pieces per Container		899

Assembled in USA