

HIGH PERFORMANCE.

MONO CRYSTALLINE HALF CUT MBB MODULE.



NOORAN144-6-530-550Wp-HCM-S-15.

HIGHEST PERFORMANCE THROUGH STATE-OF-THE-ART CELL TECHNOLOGY



NOORAN ADVANTAGE.

- » Half Cut PERC (Passivated Emitter Rear Cell) solar cell technology Up to 21.60% Module efficiency
- » Lower Operating Temperature.
- » Reduce BOS Cost with high power.
- » Excellent PID resistance
- » 1500VDC system voltage



HALF CUT PERC SOLAR CELL

Lower Resistance of Half Cut PERC Solar cells ensure higher power. Unique Cell String Layout and Split J-box reduce the energy loss from the raw shading.



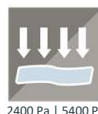
HIGH EFFICIENCY

High module conversion efficiency up to 20.80% through innovative manufacturing technology.



LOW-LIGHT PERFORMANCE

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments.



SEVERE WEATHER RESILIENCE

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



DURABILITY AGAINST NOORAN EXTREME ENVIRONMENTAL CONDITIONS

High salt mist and ammonia resistance certified by KIWA.



25-YEARS LINEAR PERFORMANCE WARRANTY

12-years limited warranty for materials and workmanship. NOORAN guarantees that each module shall deliver the following minimum output as shown in the datasheet for.

About NOORAN

NOORAN is a leading provider and manufacturer of smart energy solutions with high performance and top quality standards. NOORAN products are ideal for utility-scale PV power plants, as well as residential and commercial rooftop installations. NOORAN and its trusted technology partners provide innovative renewable energy solutions meeting the highest standards in terms of reliability, safety and durability – guaranteed by one of the world-leading re-insurance groups. With NOORAN's premium products, investors and owners enjoy long-term returns on investment and savings on their electricity bill.



خورشید فرصتی است برای زندگی

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ENGINEERING DRAWINGS & TECHNICAL PARAMETERS

PHYSICAL PARAMETERS

Solar Cell	Monocrystalline silicon 182 mm
Cell Configuration	144 cell (24 x 6)
Module Dimension	2279 x 1134 x 35 mm
Weight	28.6 kgs
Superstrate	3.2 mm, High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Backsheet
Frame	Silver Anodized Aluminum Alloy Type 6063T5, Silver Color
J-Box	IP68, 1500VDC, 3 Bypass Diodes
Cables	4.0 sqmm (12AWG), 500 mm Length (Customer Demand)
Connector	IP68 MC4 Compatible

ELECTRICAL PARAMETERS (STC)

TYPE	NOORAN144-6-530M	NOORAN144-6-535M	NOORAN144-6-540M	NOORAN144-6-545M	NOORAN144-6-550M
Rated Maximum Power at STC (Wp)	530	535	540	545	550
Open Circuit Voltage Voc (V)	49.31	49.44	49.61	49.76	49.91
Maximum Power Voltage Vmpp (V)	41.32	41.46	41.65	41.81	41.97
Short Circuit Current Isc (A)	13.73	13.78	13.85	13.92	14.02
Maximum Power Current Imp (A)	12.83	12.90	12.97	13.04	13.10
Module Efficiency (%)	20.50	20.70	20.90	21.10	21.30

STC: Irradiance 1000W/m², Cell Temperature 25°C, air mass 1.5

ELECTRICAL PARAMETERS (NOCT)

TYPE	NOORAN144-6-530M	NOORAN144-6-535M	NOORAN144-6-540M	NOORAN144-6-545M	NOORAN144-6-550M
Max Power Pmax (Wp)	401	405	408	412	416
Open Circuit Voltage Voc (V)	46.18	46.31	46.43	46.55	46.68
Max Power Voltage Vmpp (V)	38.57	38.78	39.0	39.2	39.43
Short Circuit Current Isc (A)	11.01	11.05	11.10	11.13	11.18
Max Power Current Imp (A)	10.39	10.43	10.47	10.51	10.55

NOCT: Under Normal Operating Cell Temperature, Irradiance of 800 W/m², Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

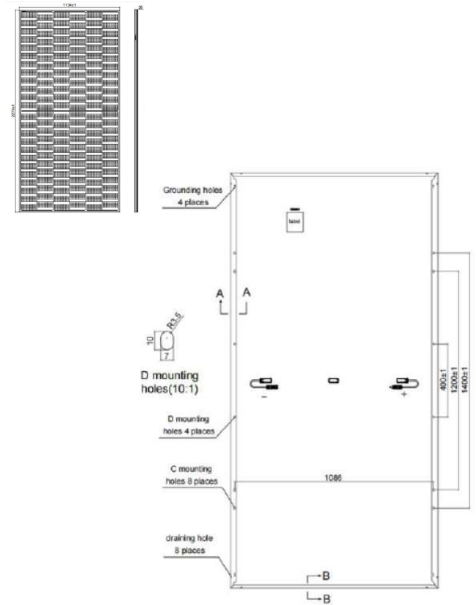
TEMPERATURE COEFFICIENT AND PARAMETERS

Nominal Operating Cell Temperature (NOCT)	42°C ± 2°C
Temperature Coefficient of Pmax	-0.34%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	0.050%/°C
Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Limiting Reverse Current	25A
Maximum Series Fuse Rating	25A
Power Tolerance (W)	0 to +3%
Application Class	Class A
Wind and Snow Front Load	Up to 5,400 Pa
Wind Back Load	2,400 Pa

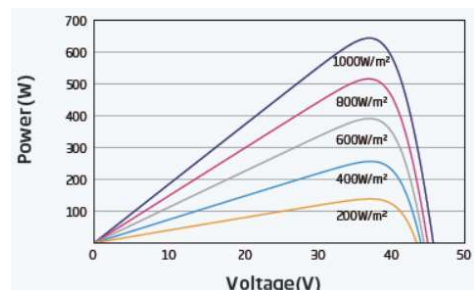
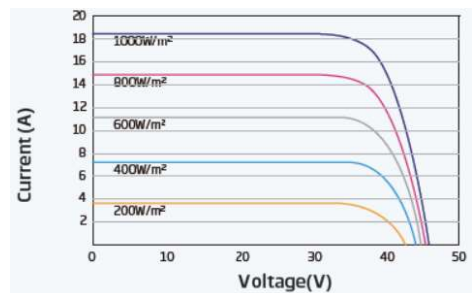
PACKAGING CONFIGURATION

	40ft
Number of Modules per Container	620
Number of Modules per Pallet	31
Number of Pallets per Container	20
Box Dimension (L x W x H) in mm	2310 x 1130 x 1255
Box Gross Weight (Kg)	902

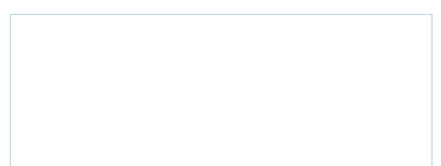
DIMENSION OF PV MODULE UNIT



I-V CURVE



AUTHORIZED PARTNER OF NOORAN



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