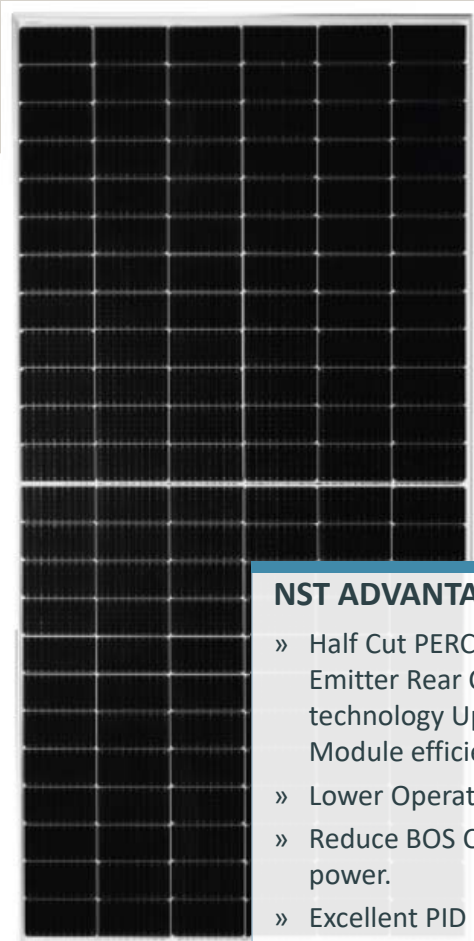


# HIGH PERFORMANCE. BIFACIAL MONO CRYSTALLINE HALF CUT MBB MODULE.



**NST144-6-530-550Wp-PEBI-GG-S-15.**

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



- NST ADVANTAGE.**
- » Half Cut PERC (Passivated Emitter Rear Cell) solar cell technology Up to 21.30% 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.



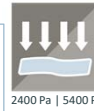
**HIGH EFFICIENCY**

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.



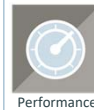
**SEVERE WEATHER RESILIENCE**

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



**DURABILITY AGAINST EXTREME ENVIRONMENTAL CONDITIONS**

High salt mist and ammonia resistance certified by KIWA.



**30-YEARS LINEAR PERFORMANCE WARRANTY**

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

## About NOOR Solar Technology (NST)

NST is a leading provider and manufacturer of smart energy solutions with high performance and top quality standards. NST products are ideal for utility-scale PV power plants, as well as residential and commercial rooftop installations. NST 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 NST’s premium products, investors and owners enjoy long-term returns on investment and savings on their electricity bill.



**PREMIUM PRODUCTS – PREMIUM RESULTS!**

# HIGH PERFORMANCE. BIFACIAL MONO CRYSTALLINE HALF CUT MBB MODULE.



## NST144-6-530-550Wp-PEBI-GG-S-15.

### 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	32 kgs
Front Glass	2 mm, High Transmission, Low Iron, Semi- Tempered ARC Glass
Back Glass	2 mm, High Transmission, Low Iron, Semi- Tempered ARC Glass
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	NST144-6-530M	NST144-6-535M	NST144-6-540M	NST144-6-545M	NST144-6-550M
Rated Maximum Power at STC (Wp)	530	535	540	545	550
Open Circuit Voltage Voc (V)	49.24	49.39	49.54	49.69	49.88
Maximum Power Voltage Vmpp (V)	41.39	41.57	41.75	41.87	42.05
Short Circuit Current Isc (A)	13.76	13.83	13.89	13.96	14.01
Maximum Power Current Imp (A)	12.81	12.87	12.94	13.02	13.08
Module Efficiency (%)	20.50	20.70	20.90	21.10	21.30

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, air mass 1.5

#### BI-FACIAL OUTPUT - Backside Power Gain (Reference to 540M Front)

Rearside power Gain	5 %	15 %	25 %
Power Output (W)	567	621	675
Module Efficiency (%)	21.9	24.0	26.1

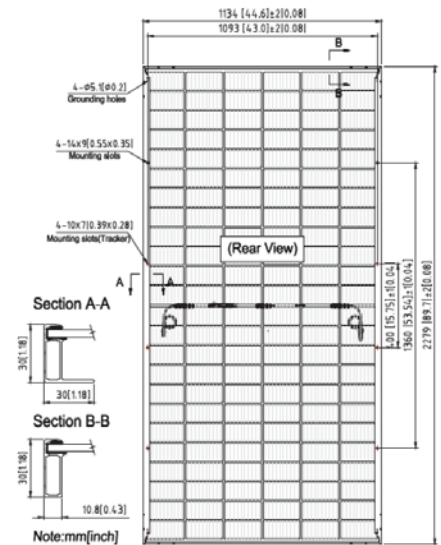
#### TEMPERATURE COEFFICIENT AND PARAMETERS

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

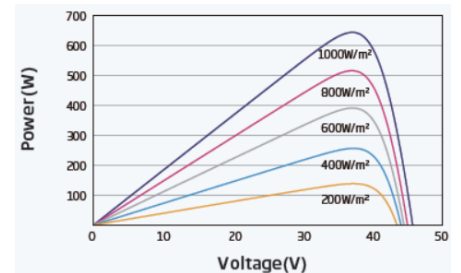
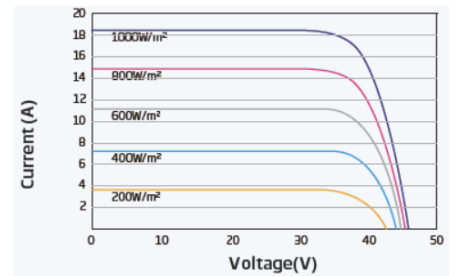
#### PACKAGING CONFIGURATION

	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)	1042

#### DIMENSION OF PV MODULE UNIT



#### I-V CURVE



#### AUTHORIZED PARTNER OF NST

