# MAXIMIZING PERFORMANCE. BIFACIAL MODULES WITH PERC CELLS.



# NST60-6-295-310Wp-PEBI-GG-10.

**BOOSTIG PERFORMANCE BY CAPTURING THE LIGHT TWICE:** FRONT & REAR-SIDE GENERATION FOR HIGHEST YIELDS



# PERC BIFACIAL SOLAR CELL

PERC panels have a higher energy density per square foot and perform well under high temperatures.



HIGHER POWER OUTPUT

Module power increases 5-25% generally (per different reflective condition) lower LCOE and higher IRR



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

15-years limited warranty for materials workmanship and NST guarantee that each module shall deliver the following minimum output as shown in the datasheet for each module: 0.5% annual degradation over 30 years.

- efficiency
- » Positive tolerance 0/+3%
- » Excellent PID resistance and durability against harsh conditions
- » Up to 25% energy generation bonus from rear side

# 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.

















# PRODUCT DATASHEET.

# **BIFACIAL MODULES WITH PERC CELLS.**



# NST60-6-295-310Wp-PEBI-GG-10.

# **ENGINEERING DRAWINGS & TECHNICAL PARAMETERS**

PHYSICAL PARA	AMETERS
Solar cell	PERC Bifacial Monocrystalline 156.75 X 156.75 mm
Cell configuration	60 cell (10 x 6)
Module dimension	1658 x 992 x 6.3 mm
Weight	23 kg
Front glass	2 mm, high transmission, low iron, tempered ARC glass
Back glass	2 mm, tempered glass
Interlayer	0.5 POE (white)
J-Box	IP67, 1000VDC, 3 bypass diodes
Cables	4.0 mm (12AWG), 1100 mm length (customer demand)
Connector	IP67 MC4 or its compatible

# **ELECTRICAL PARAMETERS (STC)**

ТҮРЕ	NST60-6-295 PEBI GG	NST60-6-300 PEBI GG	NST60-6-305 PEBI GG	NST60-6-310 PEBI GG	
Rated maximum power at STC (Wp)	295	300	305	310	
Open circuit voltage Voc (V)	39.4	39.7	40.0	40.4	
Maximum power voltage Vmpp (V)	31.8	32.1	32.3	32.5	
Short circuit current Isc (A)	9.73	9.81	9.89	9.98	
Maximum power current Impp (A)	9.28	9.35	9.45	9.54	
Module efficiency (%)	17.94	18.24	18.55	18.85	
STC: Irradiance 1000W/m <sup>2</sup> cell temperature 25°C air mass 1.5					

## BI-FACIAL OUTPUT – BACKSIDE POWER GAIN

5 %	Power Output (W)	310	315	320	326
	Module Efficiency (%)	18.8	19.1	19.4	19.8
15 %	Power Output (W)	339	345	351	357
	Module Efficiency (%)	20.6	20.9	21.3	21.7
25 %	Power Output (W)	369	375	381	388
	Module Efficiency (%)	22.4	22.8	23.1	23.6

## TEMPERATURE COFFEICIENT AND PARAMETERS

Nominal operating cell temperature (NOCT)	45°C ± 2°C
Temperature coefficient of Pmax	-0.385%/°C
Temperature coefficient of Voc	-0.32%/°C
Temperature coefficient of Isc	0.055%/°C
Operating temperature	-45°C~+85°C
Maximum system voltage	1000VDC
Limiting reverse current	15A
Maximum series fuse rating	15A
Power tolerance (W)	0/+3%
Application class	Class A
Wind and snow front load	Up to 5,400 Pa
Wind back load	2,400 Pa

## PACKAGING CONFIGURATION

	40ft	20ft
Number of modules per container	780	360
Number of modules per pallet	30	30
Number of pallets per container	26	12
Packing box dimension (L x W x H) in mm	1770 x 1140 x 1184	1770 x 1140 x 1183
Box gross weight (Kg)	753	753

# Dimension of PV Modules Unit: mm Positive(+) Stroot Stroot

## I-V CURVE





