# NEOSUN NS-270P | 275P | 280P

Solar PV Modules with advanced 5BB solar cells provide high-output performance even at low insolation and low NOCT level. The unique manufacturing process ensures unparalleled quality control for every component of the module.

With its low unit cost and long service life this solar panel is a perfect solution for a project of any size.

19.2%

### **EXCELLENT CELLS EFFICIENCY**

We use only 5BB Grade-A Cells with efficiency up to 19.2% achieved through advanced cell manufacturing technology



#### **EXCELLENT WEAK LIGHT PERFORMANCE**

Solar modules from NEOSUN Energy have excellent weak light performance (morning, evening and cloudy days)



#### POSITIVE POWER TOLERANCE

Guarantee from 0 to +8W as power tolerance, you can obtain more power than conventional output



#### SAND AND SALT PROTECTION

Reliable quality leads to a better sustainability even in harsh environment like desert or coastline



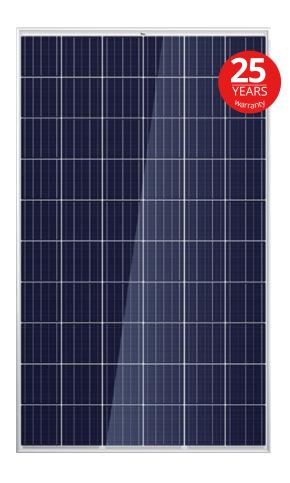
#### PANEL THICKNESS

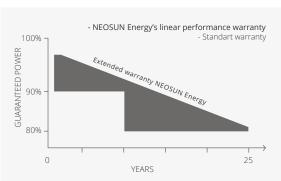
The latest technologies allow us to make thin and light solar modules. Easy installation and transportation



#### HIGH WIND AND SNOW RESISTANCE

NEOSUN Energy modules withstand snow load of up to 550 kg/m<sup>2</sup> and wind speed of up to 162km/h





For a period of twenty-five (25)years commencing on the Warranty Start Date, loss of power output

of the nominal power output measured at Standard Test Conditions (ST C) for the Product(s) shall not exceed:

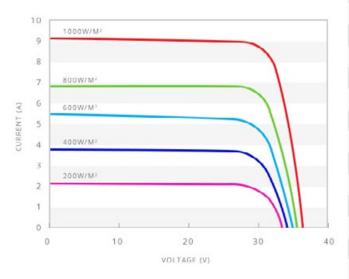
- 1. For Polycrystalline Products: 2% in the first year, thereafter 0.67% per year.ending with 82% in the 25th year after the Warranty Start Date.
- 2. For Monocrystalline Products: 3 % in the first year, thereafter 0.67% per year, ending with 81 % in the 25th year after the Warranty Start Date.

The Warranty Start Date shall be defined as the date of the Bill of Lading date



## I-V curves

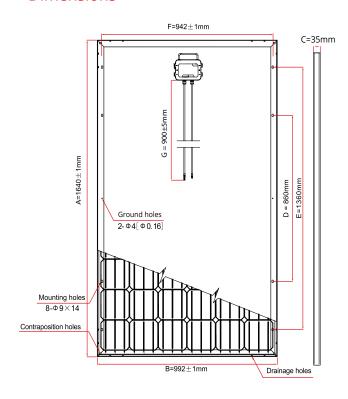
I-V Curves of PV module NEOSUN 270W at different light power



Electrical characteristics			
Solar cells:	Poly-crystalline 5BB, 6 inch, 6x10 pcs		
Max Power			280W
Power Tolerance	0 to +8W		
Voltage at Pmax (Vmp)	31.2V	31.4V	31.6V
Current at Pmax (Imp)	8.65A	8.76A	8.86A
Open-Circuit Voltage (Voc)	37.2V	38.0V	38.5V
Short-Circuit Current (lsc)	9.06A	9.18A	9.29A
Module Efficiency	16.6%	16.9%	17.3%
Max-System Voltage (VDC)	1000V(IEC), 600V(UL)		
No. of Bypass Diodes (pcs.)	3		
Max Series Fuse (A)	15A		
Temperature Coefficient of Pmax	-0.41% / °C		
Temperature Coefficient of Voc	-0.33% / °C		
Temperature Coefficient of Isc	0.06% / °C		
Nominal Operating Cell t°C	45 ± 2°C		

<sup>\*</sup>STC Conditions (1000W/m2; 1.5 AM and 25°C Cell temperature)

## **Dimensions**



Mechanical Characteristics				
Cable type, Diameter and Length	Φ =4mm2, L=900±5mm			
Type of Connector	Compatible type MC4			
Dimension AxBxC	1640x992x35mm			
Weight	18 kg			
Front Glass	Tempered with AR coating			
Junction Box (protection degree)	IP67 Rated			
Frame	Clear anodized aluminum alloy			

Qualification Test Parameters				
Dielectric Insulation Voltage	6000VDC max			
Operating Temperature	-40°C to +85°C			
Max load	5400Pa			
Hailstone impact	25mm at 23m/s			
Fire safety class	Class C			

Packaging Configuration		
Container	20'GP	40'HQ
Pieces per pallet	30	30
Pallets per container	14	28
Pieces per container	420	840