TN -270P | 275P | 280P(5BB cells)

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.



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 STL 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

STL Energy modules withstand snow load of up to 550 kg/m² and windspeed 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

TN SOLAR

I-V curves

I-V Curves of PV module STL280W at different light power



Electrical characteristics			
Solar cells:	Poly-crystalline 5BB, 6 inch, 6x10 pcs		
Max Power	270W	275W	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		

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

	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			

Dimensions





Caution: read safety and installation instructions before using this product