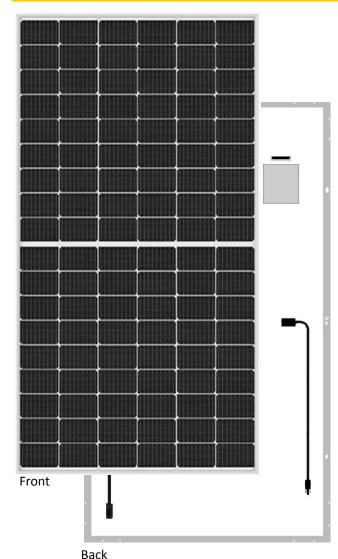


# TopCon N-Type SSM-420-450w



### **Quality Product**

All Manufactured modules are tested 100% by EL (Electroluminescence) during the Production Process & Free from micro cracks.

Our high-performance modules are highly efficient, reliable and provide optimal output.

The company manufactures solar modules in compliance with global standard including IEC 61215, 61730-1, 61730-2, 61701, UL 1703, UL 61730, CSAUS, ISO 9001:2008 & ISO 14001:2004 & 18001:2007.

# High Efficiency .

High Module efficiency is obtaining top performance even in diffused light conditions.

We are leaders in providing our customers with maximum sunlight conversion.

### **Application Possibilities**

Residential and Commercial rooftops, Car ports, Solar Farming, Balconies, Awnings, Street lights, Fences, and Canopies.

# **Our Team**

We have a team of qualified experts and engineers making sure that modules produce maximum power. We pride ourselves in caring for each individual customer needs with detailed attention. Our end goal is to give a highly efficient product with exceptional customer service.

## Guarantee

Our product is durable and has 30 years performance warranty. Integrated manufacturing of cells & modules in production line guarantees optimum performance.

## **US OFFICE:**

Sonali Energies USA LLC 111 Charlotte Place Suite 101A Englewood Cliffs, NJ 07632 Office Tel: 201-568-1424 info@sonalisolar.com

















<b>Electric Performance Parameter</b>						
Model	SS-M-420	SS-M-430	SS-M-435	SS-M-440	SS-M-445	SS-M-450
Nominal Maximum Power (Pmax/W)	420	430	435	440	445	450
Optimum Operating Voltage (Vmp/V)	33.05	33.7	33.91	34.13	34.34	34.56
Optimum Operating Current (Imp/A)	12.75	12.8	12.88	12.9	12.97	13.02
Open Circuit Voltage (Voc/V)	38.5	38.93	39.2	39.42	39.64	39.91
Short Circuit Current (Isc/A)	13.35	13.49	13.45	13.57	13.63	13.69
Module Efficiency STC (%)	21.48%	21.99%	22.25%	22.51%	22.76%	23.02%

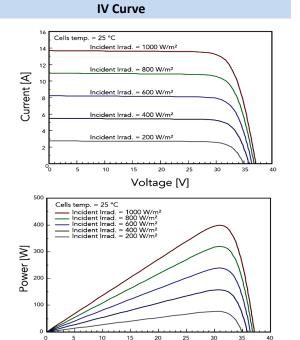
- \* Measurement Power Tolerance on Power 0 / +%
- \* Under Standard Test Conditions (STC) of irradiance of 1000W/m2
- \* Maximum System Voltage: 1500v IEC/UL

**Module Drawing** 

- \* Normal Operating cell Temperature (NOCT) of irradiance of 800W/m2,  $45\pm2^{\circ}$  C
- \* Spectrum AM 1.5 and cell temperature of 25  $^{\circ}\text{C}$
- \* Max Static Load Front Side upto 5400pa and Back side upto 2400pa

Mechanical Parameter		Temperature Coefficient			
Module Dimensions	1724 X 1134 X 35 mm / 67.87 X 44.65 X 1.37 in	Coefficient of Current	+0.048% /°C		
Weight	22 kgs / 48.5lbs	Coefficient of Voltage	-0.29% /°C		
Cell Size (Monocrystalline)	182.2x91 mm / 7.17x3.58 in	Coefficient of Power	-0.35% /°C		
No Of Cell	108 (6 X 18)	Tested Operating Conditions			
Junction Box	IP68, 3 Bypass diodes	Temperature Cycling Range	-40°C to 85°C		
Solar Cable Length (4mm²)	1200mm (47.24inch)	Humidity Freeze, Damp Heat	85% RH		
Connectors	MC4 compatible	Product Warranty			
Glass (Tempered & Low Iron )	3.2mm (0.125in) ARC	Product Warranty	15 Years		
Encapsulate	EVA	Linear Performance Warranty	First 10 Years up to 90%, next 20 years up to 80%		
Back Cover	White Backsheet	Linear Performance Warranty			
Frame (Silver)	Anodized Aluminum Alloy	Packaging			
Max.Fuse Rating	25A	31pcs/Pallet , 806pcs/Container			

# 35 35 37 37 360 37 3860 3860



Voltage [V]

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