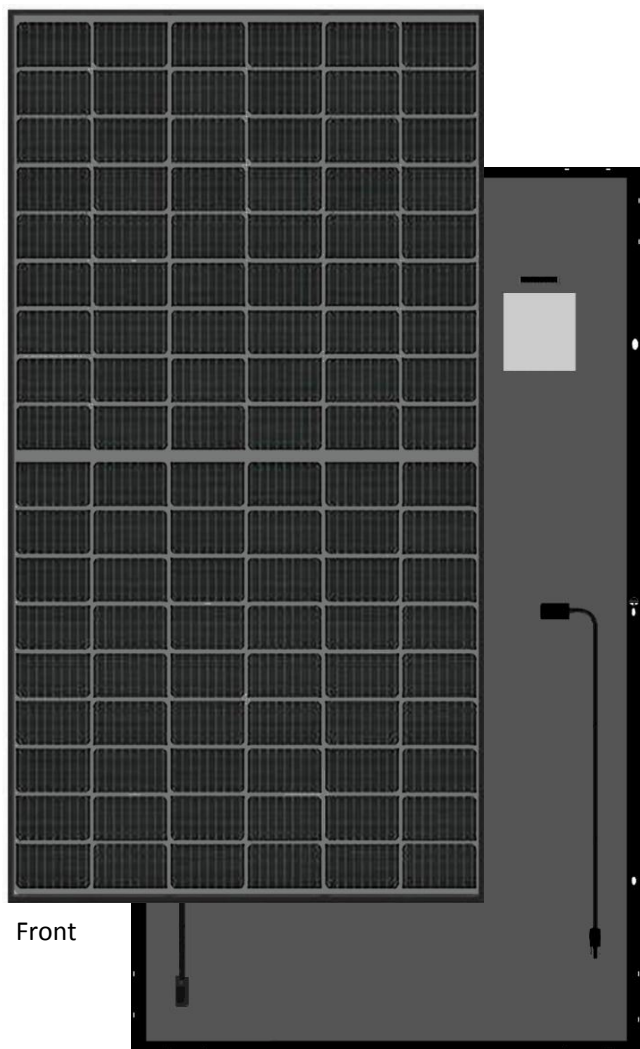




## TopCon N-Type SSM-430-450w



Front

Back

### 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, 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



### Electric Performance Parameter

| Model                             | SS-M-430 | SS-M-435 | SS-M-440 | SS-M-445 | SS-M-450 |
|-----------------------------------|----------|----------|----------|----------|----------|
| Nominal Maximum Power (Pmax/W)    | 430      | 435      | 440      | 445      | 450      |
| Optimum Operating Voltage (Vmp/V) | 33.7     | 33.91    | 34.13    | 34.34    | 34.56    |
| Optimum Operating Current (Imp/A) | 12.8     | 12.88    | 12.9     | 12.97    | 13.02    |
| Open Circuit Voltage (Voc/V)      | 38.93    | 39.2     | 39.42    | 39.64    | 39.91    |
| Short Circuit Current (Isc/A)     | 13.49    | 13.45    | 13.57    | 13.63    | 13.69    |
| Module Efficiency STC (%)         | 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/m<sup>2</sup>

\* Maximum System Voltage: 1500v IEC/UL

\* Normal Operating cell Temperature (NOCT) of irradiance of 800W/m<sup>2</sup>, 45± 2° C

\* Spectrum AM 1.5 and cell temperature of 25 °C

\* Max Static Load Front Side upto 5400pa and Back side upto 2400pa

### Mechanical Parameter

|                                        |                                                  |
|----------------------------------------|--------------------------------------------------|
| Module Dimensions                      | 1724 X 1134 X 35 mm /<br>67.87 X 44.65 X 1.37 in |
| Weight                                 | 22 kgs / 48.5lbs                                 |
| Cell Size (Monocrystalline)            | 182.2x91 mm / 7.17x3.58 in                       |
| No Of Cell                             | 108 (6 X 18)                                     |
| Junction Box                           | IP68, 3 Bypass diodes                            |
| Solar Cable Length (4mm <sup>2</sup> ) | 1200mm (47.24inch)                               |
| Connectors                             | MC4 compatible                                   |
| Glass (Tempered & Low Iron )           | 3.2mm (0.125in) ARC                              |
| Encapsulate                            | EVA                                              |
| Back Cover                             | Black Backsheet                                  |
| Frame (Black)                          | Anodized Aluminum Alloy                          |
| Max.Fuse Rating                        | 25A                                              |

### Temperature Coefficient

|                        |             |
|------------------------|-------------|
| Coefficient of Current | +0.048% /°C |
| Coefficient of Voltage | -0.29% /°C  |
| Coefficient of Power   | -0.35% /°C  |

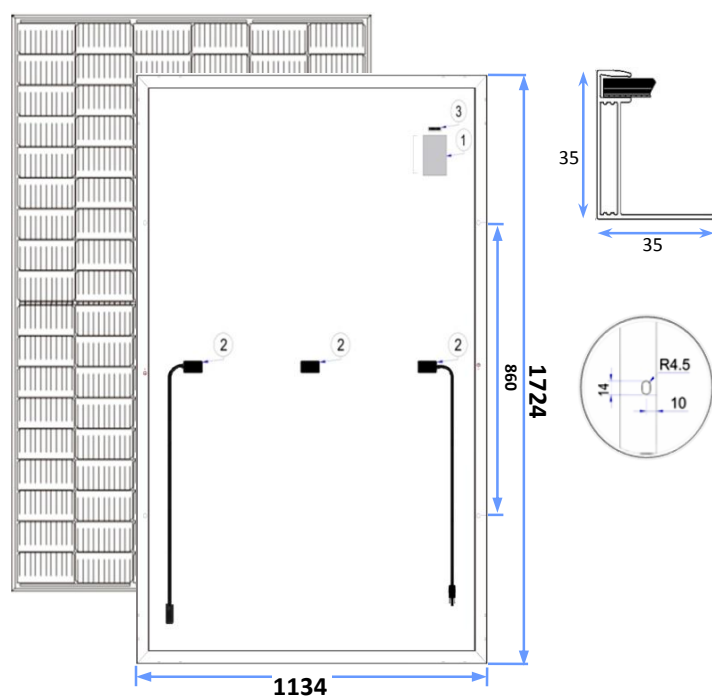
### Tested Operating Conditions

|                            |               |
|----------------------------|---------------|
| Temperature Cycling Range  | -40°C to 85°C |
| Humidity Freeze, Damp Heat | 85% RH        |

### Product Warranty

|                             |                                                      |
|-----------------------------|------------------------------------------------------|
| Product Warranty            | 25 Years                                             |
| Linear Performance Warranty | First 10 Years up to 90%,<br>next 20 years up to 80% |

### Module Drawing



### IV Curve

