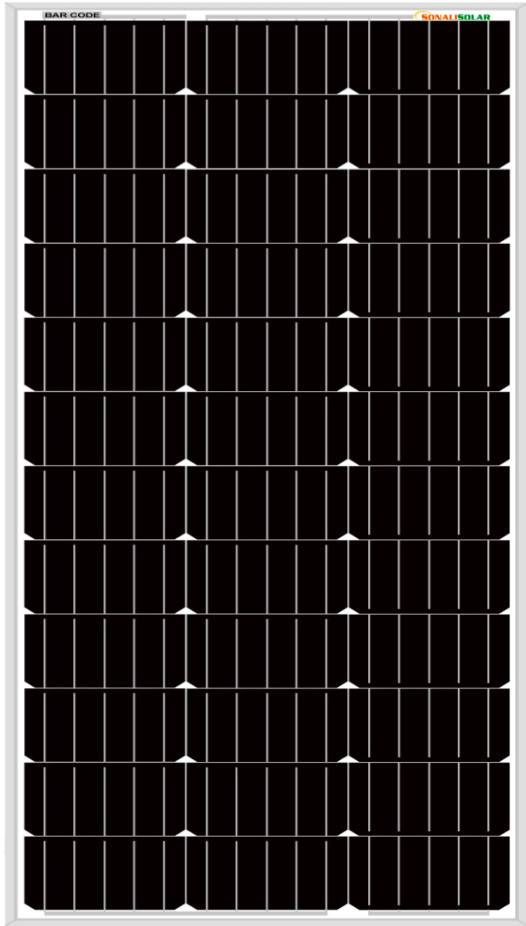




# 100W SOLAR KIT



### 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.

### 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.

### 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.

### Warranty

Our product is durable and has 12 years performance warranty. Integrated manufacturing of cells & modules in production line guarantees optimum performance.



### Application Possibilities:-

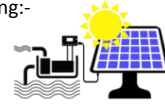
Residential and Commercial rooftops:-



Awning & Canopies:-



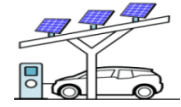
Solar Farming:-



Street lights:-



Car ports:-



Solar Mobile Van:-



Balconies:-



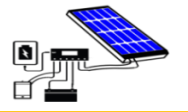
Solar Boat:-



Fences:-



Solar Kit:-



### US OFFICE:

Sonali Energiees USA LLC  
111 Charlotte Place Suite 101A  
Englewood Cliffs, NJ 07632  
Office Tel: 201-568-1424





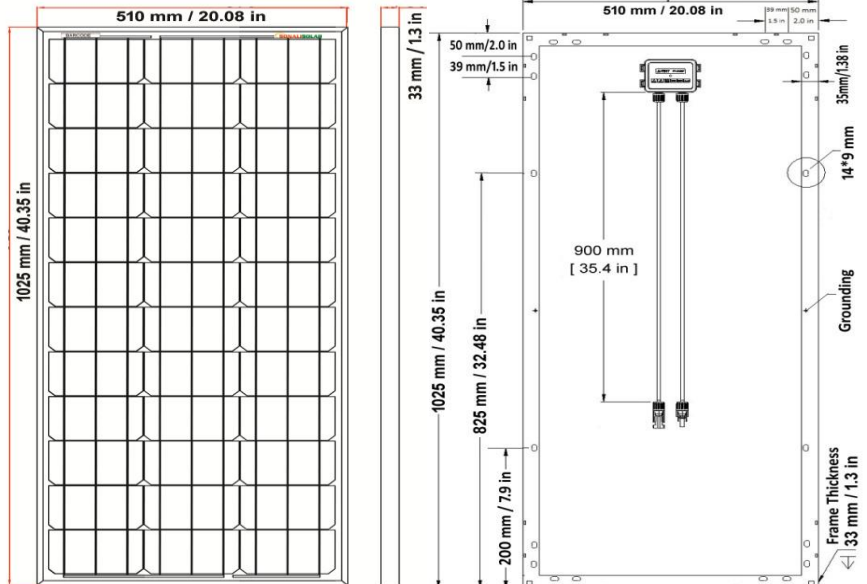
# 100W SOLAR KIT

## Electric Performance Parameter

Model	SS-M-100
Nominal Maximum Power (Pmax/W)	100
Optimum Operating Voltage (Vmp/V)	17.9
Optimum Operating Current (Imp/A)	5.72
Open Circuit Voltage (Voc/V)	21.6
Short Circuit Current (Isc/A)	6.24
Module Efficiency (%)	14.3%
Operating Temperature	-40°C to 85°C
Maximum System Voltage	1000V DC
Fusing Current	15 A
Power Tolerance	0~+5W
Temperature coefficients of Pmax	-0.47%/K
Temperature coefficients of Voc	-0.351%/K
Temperature coefficients of Isc	0.035%/K
Nominal operating cell temperature	43±2°C (NOCT)

STC: irradiance of 1000W/m<sup>2</sup>; Module temperature of 25 °C; AM=1.5

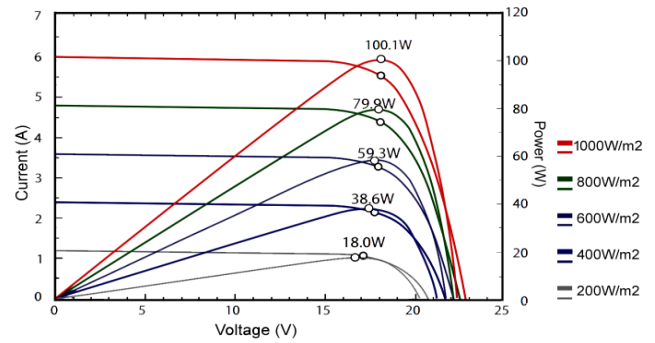
## Technical Drawing



## Mechanical Parameter

Module Dimensions	1025 X 510 X 33 mm / 40.35 X 20.08 X 1.3 inch
Weight	7.5 kgs / 16.53lbs
Cell Type (Mono-crystalline)	156.75x80 mm / 6.17x3.15 inch
No Of Cell	36 (3 X 12)
Front Glass	3.2mm Tempered & Low Iron
Frame	Anodized Aluminum Alloy
Junction Box	IP65 with Bypass diodes
Output JB Cable	UL 12AWG/TUV 4.0 mm <sup>2</sup> , Length:900 mm (35.43 in)
Connectors	Mc4 compatible

## IV Curve



## Extra Cable - Connector

- \* 12 Ft 10AWG Tray Cable with one end MC4+
  - \* 12 Ft 10AWG Tray Cable with one end MC4-
  - \* 12 Ft 10AWG Tray Cable with one end Ring Terminal
  - \* 12 Ft 10AWG Tray Cable with one end Ring Terminal
- Marine batteries typically have two posts, a 3/8"-16 threaded post for the positive terminal, and a 5/16"-18 threaded post for the negative terminal. It is 10 AWG.

## Charge Controller (PWM)

Battery Voltage	12 V/24 V Auto
Charge /Discharge Current	10 Amp
Float Charge	13.7 V
Discharge Stop	10.7 V
Discharge Reconnect	12.6 V

## Mounting Bracket

With Clamps and Nylok screws No. 10 SS x 20mm

## Material & Workmanship Warranty

For Solar Module	12 years
For Battery	3 years
For Charge Controller	1 Year
For Cable & Connector, Fuses, Mounts & Brackets, etc Accessories	1 Year

