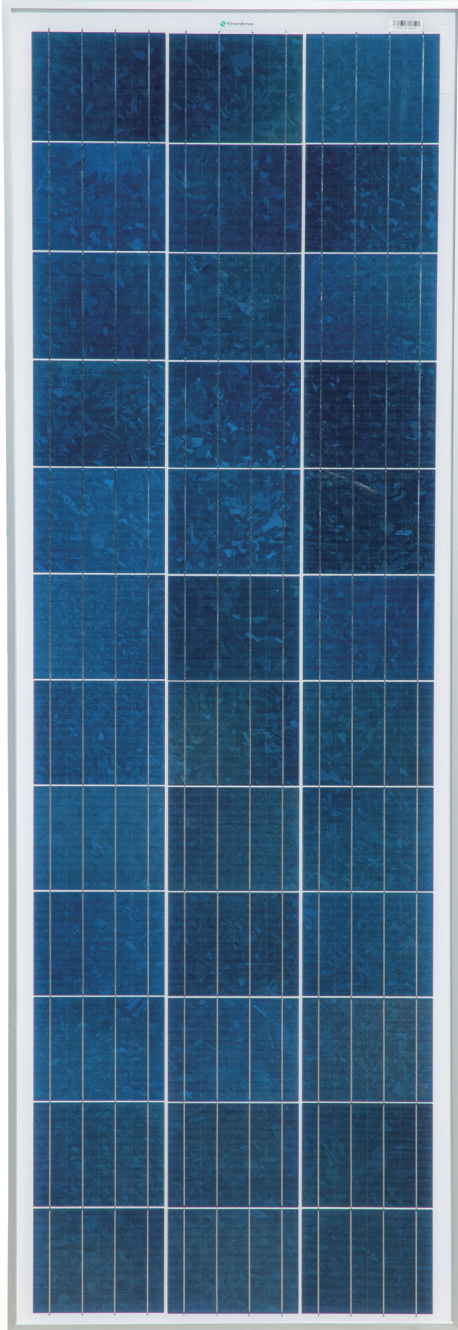


**SP-EN120W / SP-EN120W-B  
F 35mm  
Mono Solar Panel**



## Key Features



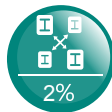
**High Conversion Efficiency**  
Module efficiency up to 14.06% achieved through advanced cell technology and manufacturing capabilities



**Positive Tolerance**  
Positive tolerance of up to -1%+~3% delivers higher output reliability



**High PID Resistant**  
Advanced cell technology and qualified materials lead to high PID resistant



**Current Sorting Process**  
System output maximised by reducing mismatch losses up to 2% with modules sorted and packaged by amperage



**Extended Wind and Snow**  
Load tests  
Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)



**Withstanding Harsh Environment**  
Reliable quality leads to a better sustainability even in harsh environments in the outdoors

## Quality Guarantee

- \* High efficiency solar cells, Low resistance loss and higher conversion efficiency
- \* Double EL test before and after lamination, highly controls product defects
- \* Solar panel classified by current, to improve system performance

## Certificates

- \* ISO9001:2015
- \* ISO14001:2015
- \* ISO45001:2018
- \* CE;CQC;SGS;IN METRO;DEKRA



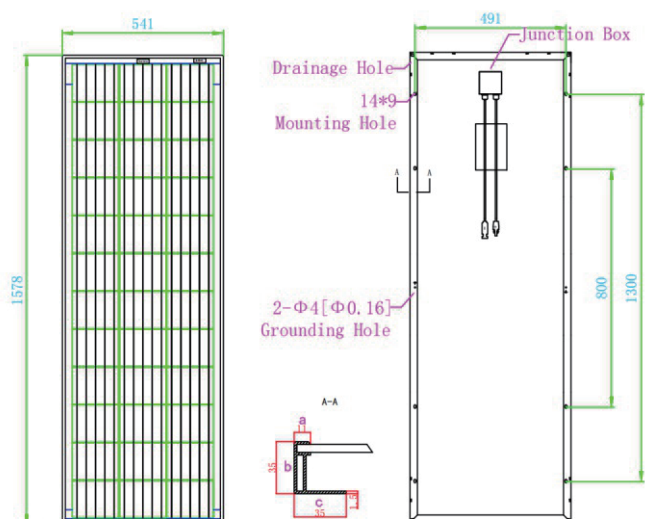
# SP-EN120W / SP-EN120W-B F 35mm Mono Solar Panel

## Electrical Characteristics

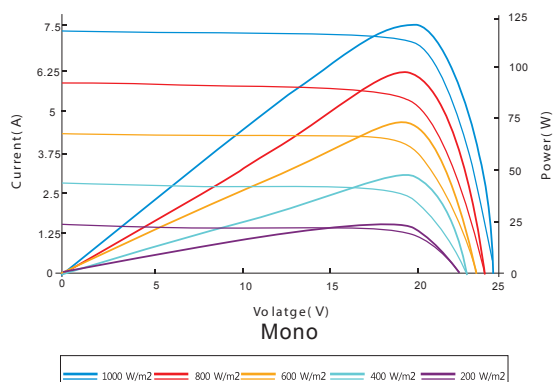
| STC                            | SP-EN120W \ SP-EN120W-B |
|--------------------------------|-------------------------|
| Maximum Power(Pmax)            | 120W                    |
| Optimum Operating Voltage(Vmp) | 18.4V                   |
| Optimum Operating Current(Imp) | 6.53A                   |
| Open Circuit Voltage(Voc)      | 22.8V                   |
| Short Circuit Current(Isc)     | 7.23A                   |
| Module Efficiency              | 14.06%                  |
| Operating Module Temperature   | -40°C to +85°C          |
| Maximum System Voltage         | 1000V DC (IEC)          |
| Power Tolerance                | -1%~+3%                 |

STC Irradiance 1000 W/m<sup>2</sup>, module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used

## Engineering Drawing



## I-V Curve



Excellent performance under weak light conditions: at an irradiance intensity of 800W/m<sup>2</sup> (AM 1.5, 25°C), 95.5% or higher of the STC efficiency(1000W/m<sup>2</sup>) is achieved.

## Mechanical Characteristics

|               |  |
|---------------|--|
| Solar Cell    | Polycrystalline silicon 157mm×125mm  |
| No. of Cells  | 36 (3×12)  |
| Dimensions    | 1578x541x35mm  |
| Weight        | 11.0kg   |
| Front Glass   | 3.2mm(0.13 inches) tempered glass  |
| Frame         | Anodized aluminium alloy (available in silver or black)  |
| Junction Box  | Ip67 rated   |
| Output Cables | TÜV (2Pfg1169:2007)<br>4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), symmetrical lengths(-) 900mm and (+) 900 mm |
| Connectors    | MC4 connectors   |

## Temperature Characteristics

|                                 |           |
|---------------------------------|-----------|
| NOCT                            | 45±2°C    |
| Temperature Coefficient of Pmax | -0.40%/°C |
| Temperature Coefficient of Voc  | -0.33%/°C |
| Temperature Coefficient of Isc  | 0.058%/°C |