






SF590 **TIER 1**

Bifacial N-Type Solar Module

The Megatron SF590 is a high-efficiency bifacial N-type half-cell solar module, built for reliable performance in residential, commercial, and industrial systems. With excellent power output, long-term durability, and resistance to harsh environments, it's a dependable choice for modern solar energy needs.

-  590W High Power Output
-  Excellent low-light performance
-  Has lower LID/LeTID attenuation
-  Maximize your energy density with advanced N-Type Bifacial technology
-  1500V System Voltage Support

Specifications (STC)

Irradiance at 1000W/m², Cell Temp 25 °C, Air Mass AM1.5

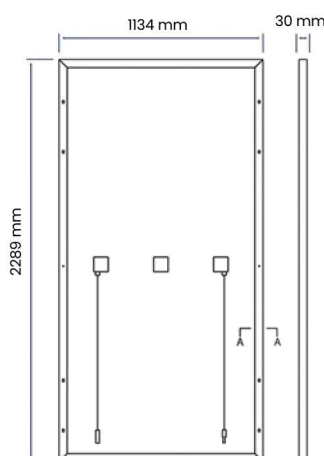
Rated Peak Power (Pmax)	590W
Maximum Power Voltage (Vmp)	43.17V
Maximum Power Current (Imp)	13.67A
Open Circuit Voltage (Voc)	51.83V
Short Circuit Current (Isc)	14.42A
Maximum System Voltage	DC 1500V
Max Overcurrent Protection Rating	25A
Open Circuit Voltage Tolerance	±3%
Short Circuit Voltage Tolerance	±3%
Operating Temperature	-40°C ~ 85°C
Warranty	25 Years



Mechanical Characteristics

Cell Type	Mono
Module Dimensions	2278 × 1134 × 30 mm
Weight	31.6 kg
Application Class	Class A
Fire Safety Class	Class C
Frame	Aluminium Alloy (Silver)
Junction Box	IP68, 1500VDC, 3 schottky Bypass Diodes
Cables	6.0mm ² Positive(+)300mm, Negative(-)300mm, Or Customized Length
Connector	IP68
Connector Type	MC4 or compatible

Dimensions



Frame

Compact & Sturdy | 30 mm

Cells

144 Monocrystalline
N-Type

