






SF590 TIER 1

Bifacial N-Type Solar Module

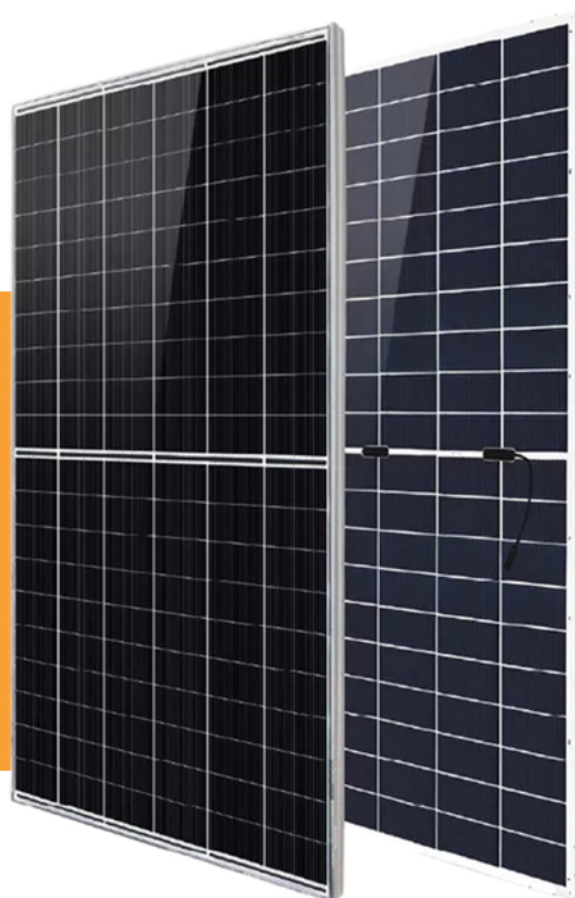
The Megatron SF590 is a high-efficiency bifacial N-type half-cell solar module, built for reliable performance in residential, commercial, and industrial systems. With excellent power output, long-term durability, and resistance to harsh environments, it's a dependable choice for modern solar energy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

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

Specifications (STC)

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

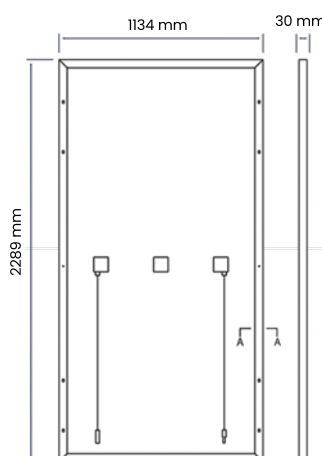
| | |
|-----------------------------------|--------------|
| Rated Peak Power (Pmax) | 590W |
| Maximum Power Voltage (Vmp) | 43.17V |
| Maximum Power Current (Imp) | 13.67A |
| Open Circuit Voltage (Voc) | 51.83V |
| Short Circuit Current (Isc) | 14.42A |
| Maximum System Voltage | DC 1500V |
| Max 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

