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**Solar Panel Guide**

**Specification Data Sheet**

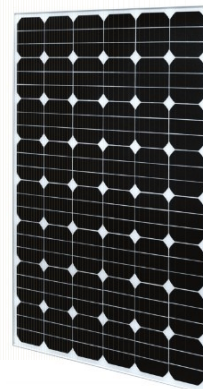
Learn more at [energypal.com/best-solar-panels-for-homes](https://energypal.com/best-solar-panels-for-homes)

## 135W Solar Module

## High Efficiency Back-Contact

- ☺ Sunny Apex's HOP series solar modules ranged from 35Watt to 155Watt
- ☺ Aesthetically using clear surface back-contact cells
- ☺ Cells with High conversion efficiency above 23%
- ☺ Anodized aluminum improving corrosion resistance
- ☺ Excellent performance under low light conditions

**\*Your best choice for off-grid solar application ! \***



### Electrical Specifications

Model Type	SA-H135	SA-H135
Peak Power (Pmax)	135W	135W
Module Efficiency	18.80%	18.80%
Maximum Power Voltage (Vmp)	16.5V	32.2V
Maximum Power Current (Imp)	8.1A	4.2A
Open Circuit Voltage (Voc)	20.1V	38.7V
Short Circuit Current (Isc)	9.1A	4.6A
Power Tolerance	-5% / + 10%	
Maximum System Voltage	70V	
Normal Operating Cell Temp.	46 °C (+/- 2)	

### Mechanical Specifications

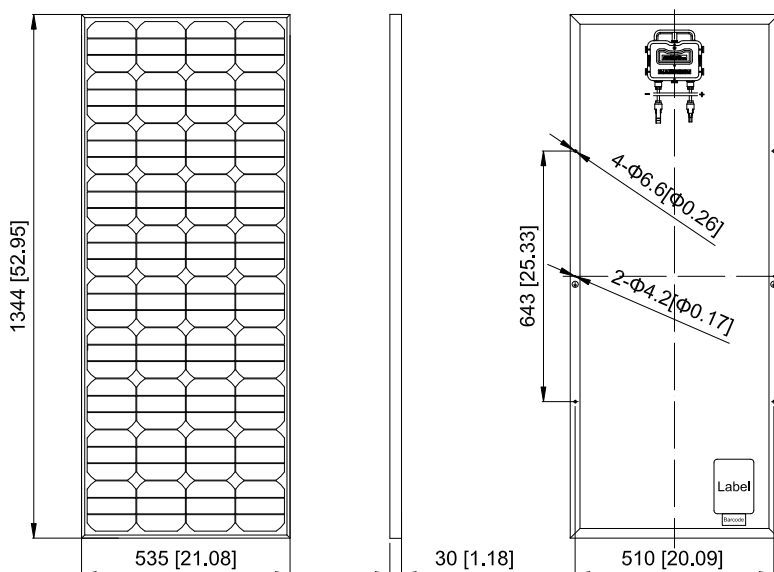
Cell type	Back contact high eff. Mono
Number of cells	Total 120 cells, 30 cells in series
Weight	8.5kg [18.74lbs]
Dimensions	1344 x 535 x 35mm [52.91 x 21.47 x 1.38in]
Frame	> 15μm clear anodized aluminum
Junction Box	IP 65 waterproof
Cables	4.00mm <sup>2</sup> , 900mm
Connectors	MC4 compatible

### Temperature Coefficients

Power	-0.32%/ °C
Voltage	-1.8mV/ °C

### Warranties & Certifications

Warranties	2 years product warranty, 20 years limited power warranty of 80% of the minimum specified power rating
Certificates	CE



Unit: mm [inch]

Note: All electrical parameters are rated at standard test conditions (irradiance of 1000W/m<sup>2</sup>, AM 1.5G, cell temperature 77°F/25°C)

Caution: Read Safety and Installation Instruction before using this product.

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