

6S HiMAX

400-425W

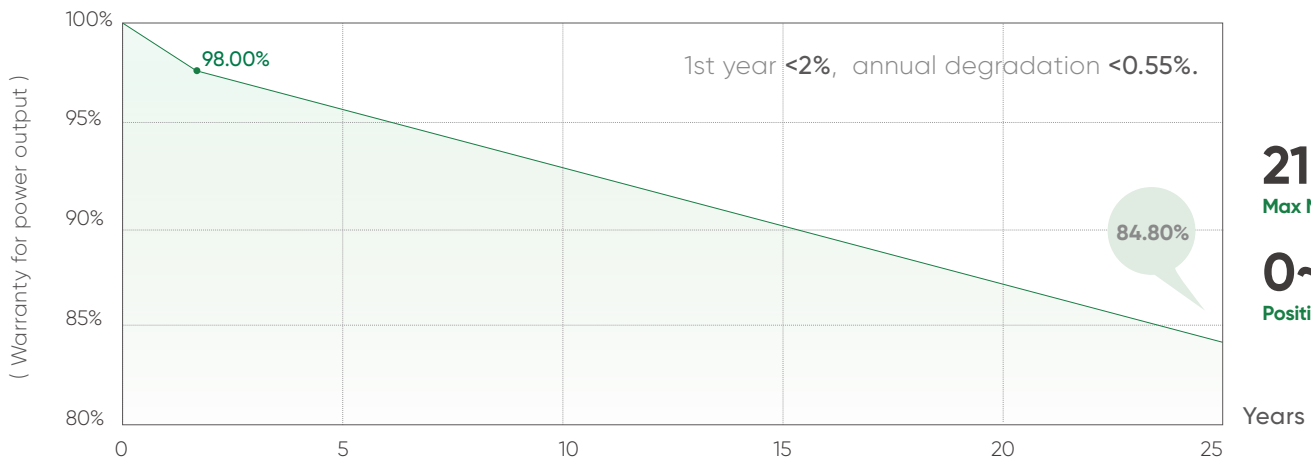
SP6-44SC

Shingled Monofacial  
Ultra Black PV Module

## Quality Guarantee

25 year Materials Warranty

25 year Power Warranty

21.40%  
Max Module Eff.0~+5W  
Positive ToleranceQuality Management System and  
Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt).

IEC62716 (Ammonia), IEC60068-2-68(Sand).

ISO 9001:2015/quality management system.

ISO 14001:2015/environmental management system.

ISO 45001:2018/occupation health safety management system.

ISO 50001:2011/energy management system.

IEC TS 62941-2016/PV industry quality management system.



\* Specifications subject to technical changes and tests. Sunpal Solar reserves the right of interpretation.

## Shingling Technology

Innovative structure, low-temperature adhesive bonding, high-density layout.

## Beautiful Appearance

Uniform layout, better aesthetic.

## Superior Safety and Reliability

No hidden welding crack, low operating temperature, high pressure resistance.

## Low System Cost

High module efficiency, reducing system cost.

## Low Hot Spot Risk

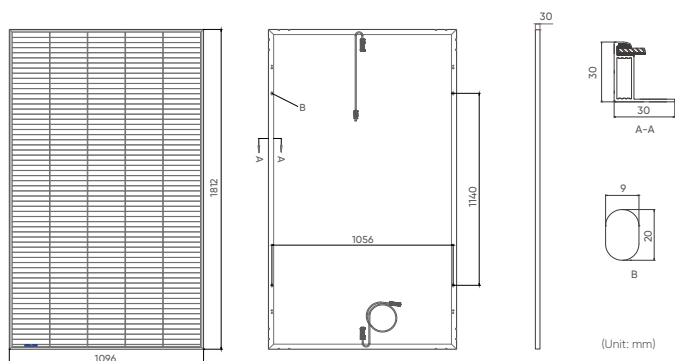
Parallel circuit design reduces shading loss.

## Low Shading Loss

Full parallel arrangement brings high effective power generation hours.



Design (mm)



Dimensions	1812 × 1096 × 30mm
Weight	20.8kg ± 0.3kg
Front glass	tempered glass, 3.2mm
Frame	Anodized aluminum alloy
Cells	Mono-crystalline solar cell
Cell Orientation	305 (61 × 5)
Junction Box	IP68, two diodes
Cable	4mm <sup>2</sup> , +300mm/-1000mm(Vertical), +220mm/-180mm(Horizontal)
Packaging	36pcs/box; 924pcs/40'container

Temperature Parameters

NMOT (Nominal Module Operating Temperature)	42.3°C(±2°C)
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C

Maximum Ratings

Maximum System Voltage [V]	DC1500 (IEC)
Series Fuse Rating [A]	25
Maximum Surface Load Capacity [Pa]	Front 5400/ Back 2400
Temperature Range [°C]	-40 ~ + 85

Electrical Characteristics (STC\*)

Module Type: SP6-44SC	425	420	415	410	405	400
Maximum Power: Pmax [W]	425	420	415	410	405	400
Open Circuit Voltage: Voc [V]	41.7	41.6	41.5	41.4	41.3	41.2
Short Circuit Current: Isc [A]	13.03	12.92	12.80	12.65	12.53	12.41
Voltage at Maximum Power: Vmp [V]	34.6	34.5	34.4	34.4	34.3	34.2
Current at Maximum Power: Imp [A]	12.30	12.19	12.08	11.93	11.82	11.71
Module Efficiency: η [%]	21.4	21.1	20.9	20.6	20.4	20.1

Electrical Characteristics (NMOT\*)

Maximum Power: Pmax [W]	320	316	312	309	305	301
Open Circuit Voltage: Voc [V]	39.8	39.7	39.6	39.5	39.4	39.3
Short Circuit Current: Isc [A]	10.50	10.41	10.31	10.19	10.09	10.00
Voltage at Maximum Power: Vmp [V]	33.0	32.9	32.8	32.8	32.7	32.6
Current at Maximum Power: Imp [A]	9.70	9.62	9.53	9.41	9.33	9.24

1. Standard Test Conditions (STC): irradiance 1000W/m<sup>2</sup>; AM 1.5; ambient temperature 25°C according to EN 60904-3;  
 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m<sup>2</sup>; wind speed 1m/s, ambient temperature 20°C.  
 3. Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

I-V Curve

