

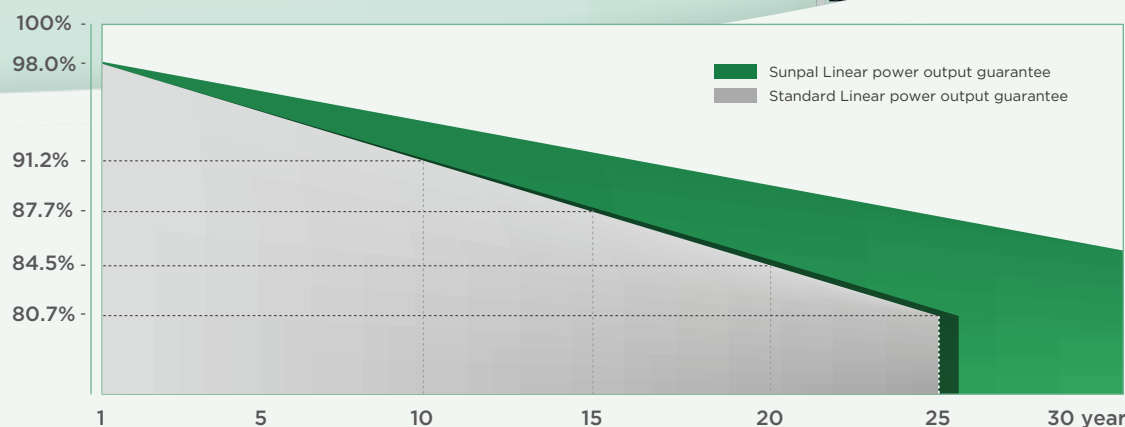
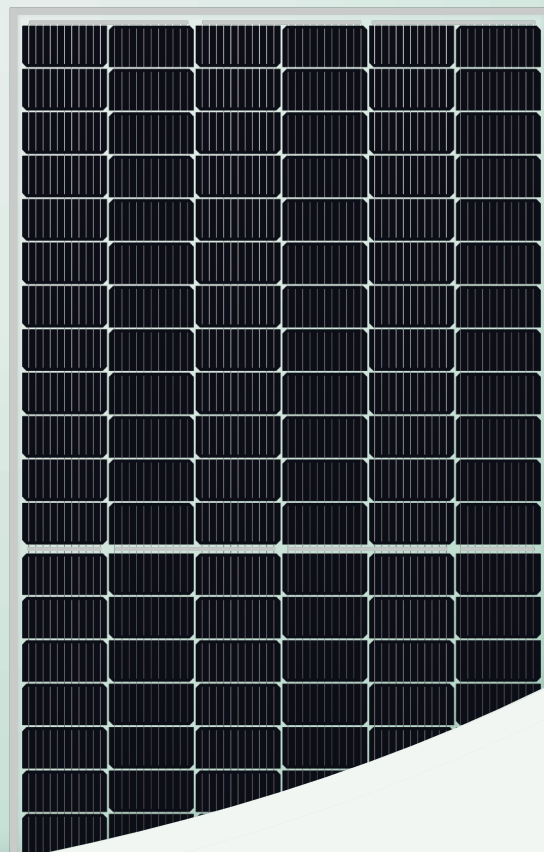
**BiMAX** 5 *Transparent Backsheet*

# 525~550W

**High Efficiency**  
**Low LID Bifacial PERC with**  
**Half-cut Technology**

## Quality Guarantee

12-year material & technology warranty  
30-year linear power output warranty



**21.2%**  
Max Module Eff.

**0~+5W**  
Positive Tolerance

### Front side performance equivalent to conventional low LID mono PERC:

- >High module conversion efficiency (up to 21.2%)
- >Better energy yield with excellent low irradiance performance and temperature coefficient
- >First year power degradation <2%

**Bifacial technology** enables additional energy harvesting from rear side (up to 25%)

**Glass/glass lamination** ensures 30 year product lifetime, with annual power degradation < 0.45%, 1500V compatible to reduce BOS cost

**Solid PID resistance** ensured by solar cell process optimization and careful module BOM selection

**Reduced resistive loss** with lower operating current

**Higher energy yield** with lower operating temperature

**Reduced hot spot risk** with optimized electrical design and lower operating current

### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO 9001:2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Management System

OHSAS 18001: 2007 Occupational Health and Safety



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



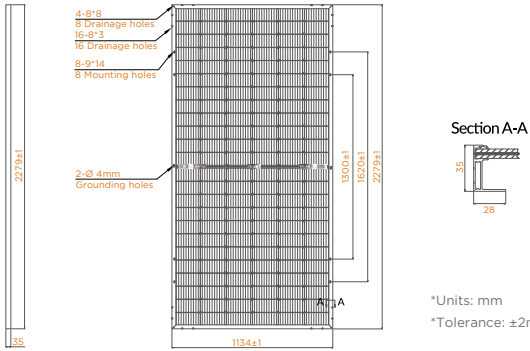
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Q Sunpal Solar

## Design (mm)



<b>Cell Orientation</b>	144 (6x24)
<b>Junction Box</b>	IP68, three diodes
<b>Output Cable</b>	4mm <sup>2</sup> , 300mm in length, length can be customized
<b>Glass</b>	Front Glass 3.2mm coated tempered glass
<b>Frame</b>	Anodized aluminum alloy frame
<b>Weight:</b>	28.5kg±3%
<b>Dimension</b>	2279x1134x35mm
<b>Packaging</b>	30pcs per pallet 600pcs per 40'ft Container

<b>Operational Temperature</b>	-40°C~+85°C
<b>Power Output Tolerance</b>	0~+5W
<b>Voc &amp; Isc Tolerance</b>	±3%
<b>Max. System Voltage</b>	DC1500V(IEC/UL)
<b>Max. Series Fuse Rating</b>	20A
<b>NOCT</b>	45±2°C
<b>Safety Class</b>	II
<b>Fire Rating</b>	UL type 3
<b>Bifaciality</b>	Glazing 70±5%
<b>Max. Static Load(Front)</b>	5400Pa
<b>Max. Static Load(Back)</b>	2400Pa

\*Units: mm \*Tolerance: ±2mm

## Electrical Characteristics

Model Number	SP525MB-72HT	SP530MB-72HT	SP535MB-72HT	SP540MB-72HT	SP545MB-72HT	SP550MB-72HT
Testing Condition	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	525	530	535	540	545	550
Open Circuit Voltage (Voc/V)	49.15	49.30	49.45	49.60	49.75	49.90
Short Circuit Current (Isc/A)	13.65	13.72	13.79	13.86	13.93	14.00
Voltage at Maximum Power (Vmp/V)	41.15	41.31	41.47	41.64	41.80	41.96
Current at Maximum Power (Imp/A)	12.76	12.83	12.90	12.97	13.04	13.11
Module Efficiency(%)	20.3	20.5	20.6	20.8	21.0	21.2
Temperature Coefficient of Isc	+0.045%/°C					
Temperature Coefficient of Voc	-0.275%/°C					
Temperature Coefficient of Pmax	-0.350%/°C					

\* STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM1.5

\* NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

\* Test uncertainty for Pmax: ±3%

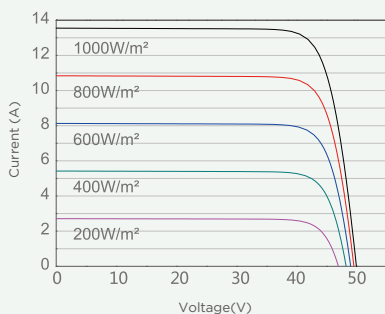
## ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER RANGES (REFERENCE TO 10% SOLAR ILLUMINANCE RATIO)

TYPE	SP525MB-72HT	SP530MB-72HT	SP535MB-72HT	SP540MB-72HT	SP545MB-72HT	SP550MB-72HT
Rated Maximum Power(Pmax/W)	562	567	572	578	583	589
Open Circuit Voltage (Voc/V)	49.54	49.67	49.80	49.93	50.03	50.21
Maximum Power Voltage(Vmp/v)	41.53	41.77	41.99	42.24	42.43	42.67
Short Circuit Current (Isc/A)	14.34	14.39	14.45	14.50	14.56	14.63
Max power Current(Imp/A)	13.52	13.58	13.63	13.69	13.74	13.79

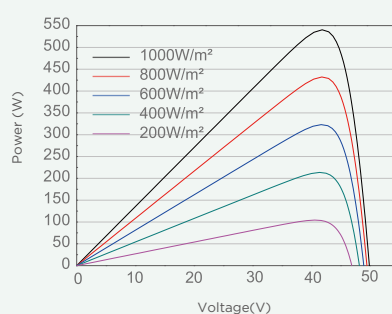
\*\* Bifaciality=Pmax,rear/Rated Pmax,front

## I-V Curve

Current-Voltage Curve(SP540MB-72HT)



Current-Voltage Curve(SP540MB-72HT)



Current-Voltage Curve(SP540MB-72HT)

