



ZONERGY

Half-Cell

ZPM530~550G-72

**Double-Glass Bifacial Half-Cell Monocrystalline
Solar Modules**



PRODUCT FEATURES



Low Lcoe

Double-sided power generation, single-sided price. Maximize limited space, savings in BOS and labour cost



HIGH POWER OUTPUT

Bifacial modules have more power generation. The average power generation on the back can reach 5%-30% of that on the front in different installation environments



LOAD CAPACITY

Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal)



LOW-LIGHT PERFORMANCE

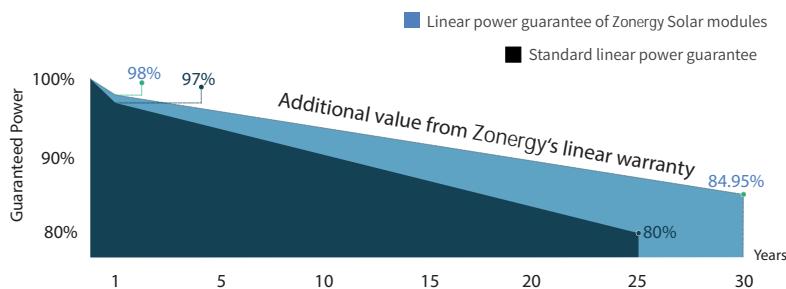
Relative low temperature coefficient and wide response spectrum guarantee higher power output in hazy, cloudy and other low-light conditions



WIDE APPLICATION

Widely used in BIPV, vertical installation, snow, high humidity and strong winds and sand zones, etc. and applicable to large-scale installation projects such as ground station, agricultural optics complementation, fishing and light complementation

LINEAR PERFORMANCE WARRANTY



product warranty



linear power warranty



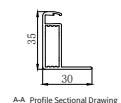
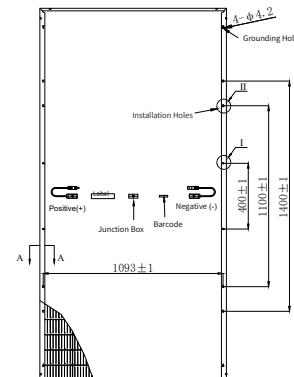
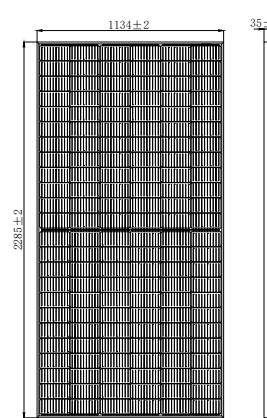
Linear attenuation of 0.45% per year within 30 years



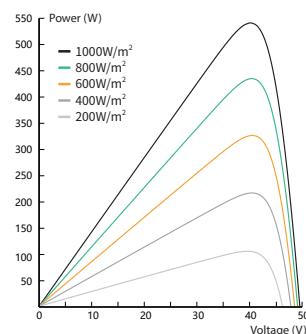
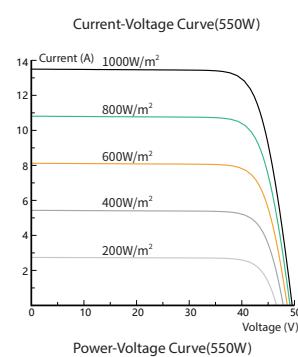
Electrical Data (STC)

Maximum Power (Pmax/W)	530	535	540	545	550
Open Circuit Voltage (Voc/V)	49.23	49.38	49.53	49.68	49.83
Short Circuit Current (Isc/A)	13.46	13.54	13.63	13.71	13.80
Voltage at Maximum Power (Vmp/V)	40.73	40.88	41.03	41.18	41.31
Current at Maximum Power (Imp/A)	13.02	13.10	13.17	13.24	13.31
Module Efficiency (%)	20.45	20.65	20.84	21.03	21.22
Operating Temperature	-40° C~+85° C				
Maximum System Voltage	1000/1500V				
STC (Standard Testing Conditions): Irradiance 1000W/m ² , Cell Temperature 25°C , AM1.5					

Module Dimensions (mm)



I-V Curve



Electrical Data (NMOT)

Maximum Power (Pmax/W)	396	400	404	408	412
Open Circuit Voltage (Voc/V)	45.26	45.41	45.56	45.71	45.85
Short Circuit Current (Isc/A)	11.22	11.29	11.37	11.44	11.53
Voltage at Maximum Power (Vmp/V)	37.49	37.64	37.79	37.94	38.05
Current at Maximum Power (Imp/A)	10.57	10.64	10.70	10.77	10.83

NMOT (Nominal Module Operating Temperature): Irradiance 800W/m², Ambient Temperature 20°C , AM1.5, Wind Speed 1m/s.

Bifacial Power Generation Parameters (Backside Gains)

5%	Maximum Power (Pmax/W)	557	562	567	572	578
	Module Efficiency (%)	21.48	21.68	21.88	22.08	22.28
15%	Maximum Power (Pmax/W)	610	615	621	627	633
	Module Efficiency (%)	23.52	23.74	23.97	24.19	24.40
25%	Maximum Power (Pmax/W)	663	669	675	681	688
	Module Efficiency (%)	25.57	25.81	26.05	26.29	26.52

Mechanical Data

Cell Type	182×91mm Mono
Cell Orientation	144(6x24)
Module Dimensions	2285×1134×35mm
Weight	32.0kg
Glass	2.0mm high transmittance, reinforced glass
Backsheet	2.0mm part of the structure is grid-like white ceramic glass
Frame Material	Anodized aluminum alloy
Junction Box	Protection class IP68
Cable	4.0 mm ² positive pole: 250 mm negative pole: 300 mm wire length can be customized
Connector	MC4 compatible connector

Temperature Coefficients

Temperature Coefficient (Pm)	-0.350%/°C
Temperature Coefficient (Voc)	-0.270%/°C
Temperature Coefficient (Isc)	0.048%/°C
NMOT (Nominal Module Operating Temperature)	41±3°C

Packaging

Transportation methods	Number of modules per cabinet	Number of modules per pallet
40HQ container	620pcs	36pcs +36pcs