POLYSHINE SOLAR

POLYSHINE® FLEXSOLAR SOLUTIONS

Easy to Install and Remove, Flexible for Various Applications

Lightweight Photovoltaic Modules



20 Years
of Polymer Materials Expertise
Proven Outdoor Performance

20,000+ Hours
of Aging Tests

Product Features

- Integrated PV Module with Mounting Structure
- Supports Removable Installation, Enabling Project Flexibility and Upgrades
- Reinforced Rigidity to Reduce Microcracks During Installation

Technical Support & Advanced Material Technologies

Polymer Chain Group Modification Technology

- Front sheet light transmittance ≥91%.
- Water vapor transmission rate <0.8g/m²·day.
- 25-year power warranty, ensuring long -term high performance.

Enhanced Resin-Fiber Interface Technology

- Static load resistance up to 5400 Pa.
- IEC61215 hail test certified.
- TÜV wind tunnel tested, resistant to Category 17 typhoons.

Nano-Hybrid Modification and Surface Fire-Resistance Treatment

- Passed flame spread and burn block tests.
- Does not collapse or spread sparks in mild fire scenarios.

Nanoscale oxide coating (optional)

- Inhibits static electricity and dust accumulation, reducing hot spot effects.
- Quick rinse cleaning boosts power generation by 3–5%.

YY1-72H520PC(F)

505~535w



Application Scenarios

Suitable for scenarios where the installation surface requires renovation, low-load scenarios with specific mounting requirements, and areas with high wind load.

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YY1-72HXXXPC(F) 505~535w

ELECTRICAL CHARACTERISTICS AT STANDARD TEST CONDITIONS(STC)

Spec/Model	Unit	YY1-72H505PC(F)	YY1-72H510PC(F)	YY1-72H515PC(F)	YY1-72H520PC(F)	YY1-72H525PC(F)	YY1-72H530PC(F)	YY1-72H535PC(F)
Max Power (Pm)	W	505	510	515	520	525	530	535
Power Tolerance	W				0~+5W			
Opt. Voltage (Vm)	V	41.89	42.04	42.19	42.34	42.49	42.64	42.79
Opt. Current (Im)	A	12.07	12.15	12.22	12.30	12.37	12.44	12.52
Open-circuit V. (Voc)	V	49.60	49.80	50.00	50.20	50.40	50.60	50.80
Short-circuit I. (Isc)	A	13.02	13.10	13.17	13.24	13.31	13.38	13.44
Module Eff. (ηm)	%	18.6	18.8	19.0	19.1	19.3	19.5	19.7

STC: AM=1.5, Irradiance 1000W/m², Cell Temp. 25°C

ELECTRICAL CHARACTERISTICS AT NMOT CONDITIONS

Spec/Model	Unit	YY1-72H505PC(F)	YY1-72H510PC(F)	YY1-72H515PC(F)	YY1-72H520PC(F)	YY1-72H525PC(F)	YY1-72H530PC(F)	YY1-72H535PC(F)
Max Power (Pm)	W	381	385	389	393	397	401	405
Opt. Voltage (Vm)	V	36.98	37.13	37.27	37.43	37.56	37.71	37.86
Opt. Current (Im)	A	10.31	10.38	10.45	10.51	10.58	10.63	10.70
Open-circuit V. (Voc)	V	44.70	44.90	45.10	45.30	45.50	45.70	45.90
Short-circuit I. (Isc)	A	10.76	10.81	10.85	10.89	10.93	10.96	10.99
Certlification	TÜV							

NMOT: Irradiance 800W/m², Ambient Temp. 20°C, Wind Speed 1m/s

TEMP. COEFFICIENTS

Nom. Operating Cell Temp. (NMOT)	41±2℃
Power Temp. Coeff.	-0.36%/℃
Voltage Temp. Coeff.	-0.26%/℃
Current Temp. Coeff.	0.04%/℃

OPERATING CONDITIONS

Max. System Voltage	DC1500V(IEC)
Max. Fuse Rating	20A
Operating Temp. Range	-40℃ ~ +85℃

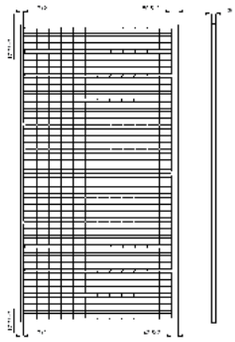
MECHANICAL CHARACTERISTICS

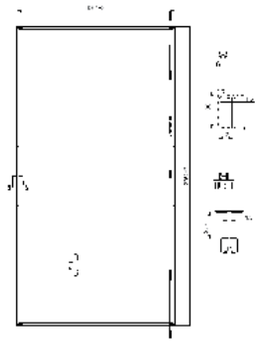
Module (L×W×H)	2262mmx1201mmx30mm (without junction box)
Module Weight	13.5kg
Cells	144 (12*12) /10BB P-type Mono 182*91mm
Encapsulation	POE
Backsheet Spec.	Backsheet (White)
Frame	Aluminum alloy
Connector	PV-KBT-EVO 2A/6I Stäubli
Junction Box IP	IP68
Cable Spec. (mm²/m)	4mm², 660mm
Bending Radius	/
Weight / Unit Area	4.97kg/m²
Power / Unit Area	185.8~196.0W/m²

PACKAGING & TRANSPORTATION

Transport	Spec	Per Container/Truck	Per Pallet
Container	20'GP	180pcs	36pcs
Container	40'HQ	360pcs	36pcs

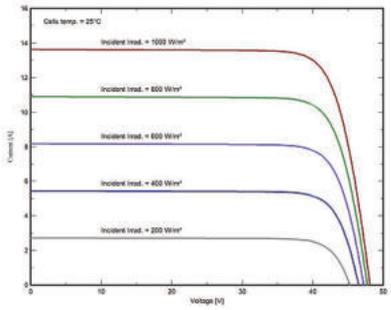
MODULE SIZE



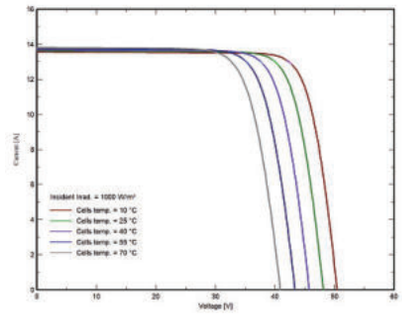


I-V CURVE

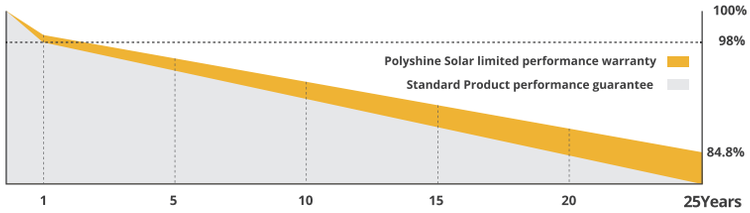
I-V Curves at Different Irradiance (YY1-72H520PC(F))



I-V Curves at Different Temp. (YY1-72H520PC(F))



PERFORMANCE WARRANTY



12Yrs QUALITY **25Yrs POWER**

※ The power output shall not be less than 98% of the minimum output power specified in the product datasheet during the first year from the date the system is installed and operating normally;

※ Annual degradation ≤0.55% thereafter;

※ ≥84.8% by year 25, based on the minimum output specified in the datasheet.