

Features



High Efficiency

MWT back contact cell and modules with busbar-free design and higher efficiency



Superior Warranty

The only single-glass module with 30-year power warranty by LLOYD'S&PICC worldwide



High Anti-Pressure Ability

Mechanical Load: 5400Pa(front)/2400Pa(rear)



High Reliability

Conductive back sheet 2D encapsulation without soldering, resulted lower degradation under multiple extreme testing condition



Low LCOE

Higher return on investment with higher power output



Lead Free

Eco-friendly PV design achieves Lead-free without soldering materials

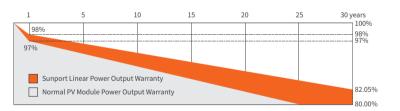
Reinsurance Coverage for 30 Years





Insured by PICC and LLOYD'S





%1st year degradation less than 2%, 30 years linear power output 82.05% guaranteed.

Comprehensive Qualifications & Certifications

- ★CQC Top Runner Advanced Technology Certification (4A class)
- ★ISO 9001:2015 Quality Management System
- ★ISO 45001: 2018 Occupation Health Safety Management System
- **★**TUV NORD Certification
- ★ISO 14001:2015 Environment Management System











Jiangsu Sunport Power Corp., Ltd

Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SPP405NH7H	SPP410NH7H	SPP415NH7H	SPP420NH7H	SPP425NH7H
Max-Power(Pm)	W	405	410	415	420	425
Power Tolerance				0~+3%		
Max-Power Voltage(Vm)	V	39.4	39.6	39.8	40.0	40.2
Max-Power Current(Im)	А	10.28	10.35	10.43	10.50	10.57
Open-Circuit Voltage(Voc)	V	48.0±3%	48.2±3%	48.4±3%	48.6±3%	48.8±3%
Short-Circuit Current(Isc)	А	10.66±5%	10.72±5%	10.78±5%	10.84±5%	10.90±5%
Module Efficiency(ηm)	%	19.7	20.0	20.2	20.5	20.7
STC: AM=1.5, Irradiation 1000W/m ² , Module Temperature 25°C						

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP405NH7H	SPP410NH7H	SPP415NH7H	SPP420NH7H	SPP425NH7H
Max-Power(Pm)	W	304	308	312	316	320
Max-Power Voltage(Vm)	V	35.9	36.1	36.3	36.5	36.7
Max-Power Current(Im)	А	8.47	8.53	8.60	8.66	8.72
Open-Circuit Voltage(Voc)	V	43.8	44.0	44.2	44.4	44.6
Short-Circuit Current(Isc)	А	8.81	8.87	8.94	9.00	9.05
NMOT: Irradiation 800W/m², Ambient temperature 20°C, Wind Speed 1m/s						

Temperature Coefficient

Nominal Module Operating Temperature	43±2°C
Temperature coefficient of Pmax	-0.36%/°C
Temperature coefficient of Voc	-0.28%/°C
Temperature coefficient of Isc	0.06%/°C

Package

Transportation	Container Size	Quantity(pcs)	Quantity(per pallet)
Container	40' HC	682 / 726	31

Mechanical Characteristics

$Dimension(L\times W\times H)$	2020mmx1016mmx35mm
Weight	22.8kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	144(24x6) / Mono / 162.75mm(Half-cell)
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP67 / IP68
Cable	4mm², 350mm (+) / 150mm (-); Customizable
Connector	TL-CABLE01S QC4.10-cd

Operating Conditions

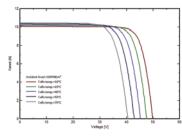
Max System Voltage	1500V(TUV)
Max Fuse Rated Current	15A
Operating Temperature Range	-40°C∼+85°C
Mechanical Load	5400Pa (front) /2400Pa (rear)
Max Allowable Hail Load	$\varphi25mm$ hail, from 1m of distance at 23 m/s
Application Class	Class A
Fire Safety Class	Class C according to ANSI/UL 1703-2018

I-V Curve

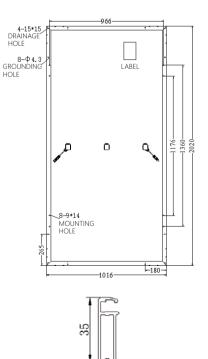
I-V Curve at different irradiation (SPP420NH7H)

Cells temp. *25°C | Incident Irrad | 1000W/m² | Incident Irrad |

I-V Curve at different temperature (SPP420NH7H)



Module Size



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