

SSD-QH7G/9BB

Monocrystalline High-efficiency Bifacial Solar Module

435W — 455W

20.9%

Module efficiency up to 20.9%



Features



9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss

Ga doped wafer, attenuation $\leq 2\%$ (1st year) / $\leq 0.45\%$ (Linear)



Industry leading high yield

Bifacial PERC cell technology, 5%-25% more yield depends on different conditions



Anti
PID

Excellent Anti-PID performance

3 times of industry standard Anti-PID test



Wider application

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area



IP68 junction box

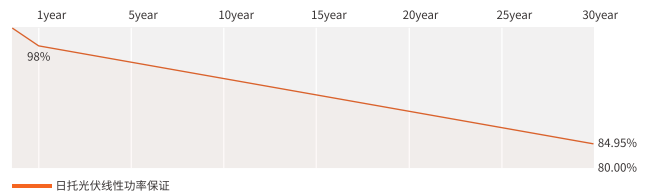
High waterproof level

Performance Warranty



Insured by PAIC and LLOYD'S

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Within the first year from the date of installation and normal operation, the output power shall not be less than 98% of the product's minimum output power as set forth in the specifications, Afterwards, maximum 0.45% output decrease per year. After 30 years, the product's output power shall not be less than 84.95% of its minimum output power as set forth in the specifications.

Comprehensive Qualifications & Certifications

- ★ ISO 9001:2015 Quality Management System
- ★ ISO 14001:2015 Environment Management System
- ★ ISO 45001: 2018 Occupation Health Safety Management System
- ★ TUV NORD Certification



Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SSD435QH7G	SSD440QH7G	SSD445QH7G	SSD450QH7G	SSD455QH7G
Max-Power(Pm)	W	435	440	445	450	455
Power Tolerance	W			0~+5		
Max-Power Voltage(Vm)	V	40.3	40.5	40.7	40.9	41.1
Max-Power Current(I _m)	A	10.80	10.87	10.94	11.01	11.08
Open-Circuit Voltage(Voc)	V	49.0	49.2	49.4	49.6	49.8
Short-Circuit Current(I _{sc})	A	11.33	11.40	11.47	11.54	11.61
Module Efficiency(η _m)	%	20.0	20.2	20.5	20.7	20.9

STC: AM=1.5, Irradiation 1000W/m², Module Temperature 25°C

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SSD435QH7G	SSD440QH7G	SSD445QH7G	SSD450QH7G	SSD455QH7G
Max-Power(Pm)	W	324	328	332	335	339
Max-Power Voltage(Vm)	V	37.6	37.8	38.0	38.2	38.4
Max-Power Current(I _m)	A	8.62	8.67	8.73	8.78	8.84
Open-Circuit Voltage(Voc)	V	45.6	45.8	46.0	46.2	46.4
Short-Circuit Current(I _{sc})	A	9.15	9.20	9.26	9.32	9.37

NMOT: Irradiation 800W/m², Ambient temperature 20°C, Wind Speed 1m/s

Temperature Coefficient

Nominal Module Operating Temperature	43±2°C
Temperature coefficient of P _{max}	-0.36%/°C
Temperature coefficient of Voc	-0.26%/°C
Temperature coefficient of I _{sc}	0.04%/°C

Package

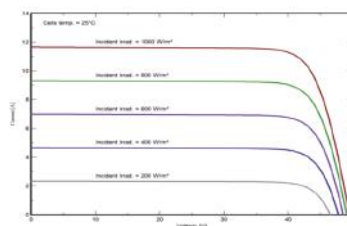
Transportation	Container Size	Quantity(pcs)	Quantity(per pallet)
Container	40' HQ	682	31
Platform Trailer	13m	744	31
Platform Trailer	17.5m	992	31

Mechanical Characteristics

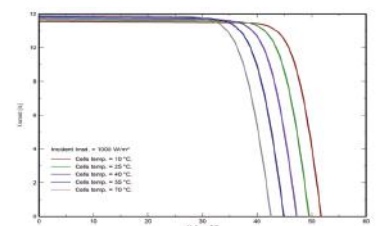
Dimension(L×W×H)	2094mmx1038mmx35mm
Weight	27.5kg
Front Glass	High Transmittance Anti-reflective Coated Tempered Glass /2mm
Back Glass	Glazed Semi-tempered Glass/2mm
Solar Cell	144(24x6) / 9BB Mono / Half-cell
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP68
Cable	350mm (+) / 150mm (-) / 4mm ² ; or Customized•Length
Connector	MC4 Compatible

I-V Curve

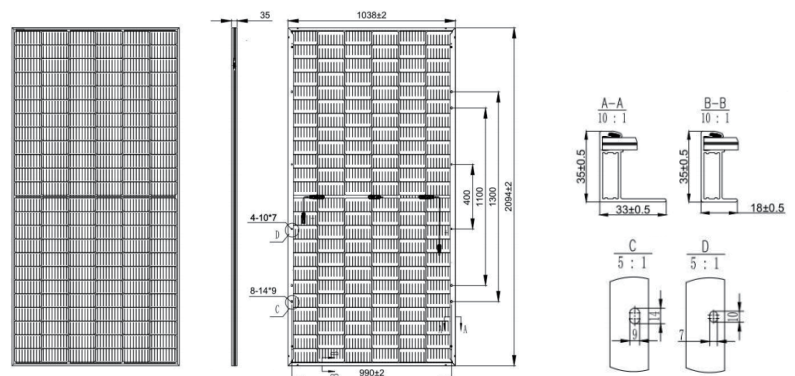
I-V Curves of SSD450QH7G at different irradiance



I-V Curves of SSD450QH7G at different cell temperature



Module Size



Operating Conditions

Max System Voltage	DC1500V(IEC)
Max Fuse Rated Current	25A
Operating Temperature Range	-40°C~+85°C
Mechanical Load	5400Pa (front) /2400Pa (rear)
Max Allowable Hail Load	φ25mm hail, from 1m of distance at 23 m/s
Application Class	Class A
Backside Output Ratio	70%±5%