

SSP—QH7H / 9BB Mono PERC Half-Cut 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) / $\leq 0.55\%$ (Linear)



Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature



Lower LCOE

2% more power generation, lower LCOE



Excellent Anti-PID performance

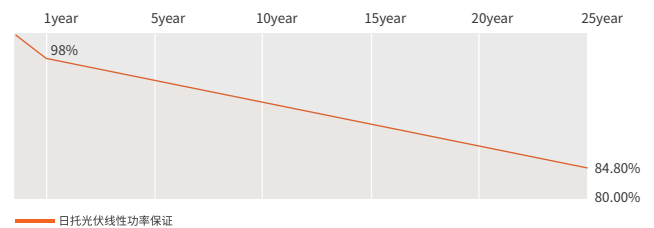
3 times of industry standard Anti-PID test



IP68 junction box

High waterproof level

Performance Warranty



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 0.55% output decrease per year. After 25 years, the product's output power shall not be less than 84.8% 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	SSP435QH7H	SSP440QH7H	SSP445QH7H	SSP450QH7H	SSP455QH7H
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	SSP435AH7H	SSP440QH7H	SSP445QH7H	SSP450QH7H	SSP455QH7H
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

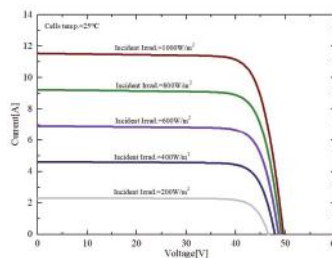
Transportation	Container Size	Quantity(pcs)	Quantity(per pallet)
Container	40' HQ	682	31
Platform Trailer	13m	744	31
Platform Trailer	17.5m	992	31

Mechanical Characteristics

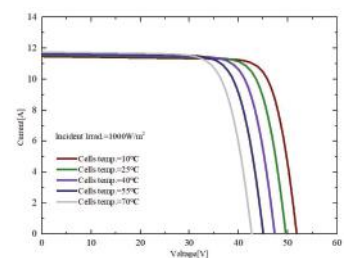
Dimension(L×W×H)	2094mmx1038mmx35mm
Weight	23.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	144(24x6) / 9BB Mono / Half-cell
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP68
Cable	4mm ² ,350mm(+)/150mm(-) or Customized-Length
Connector	MC4 Compatible

I-V Curve

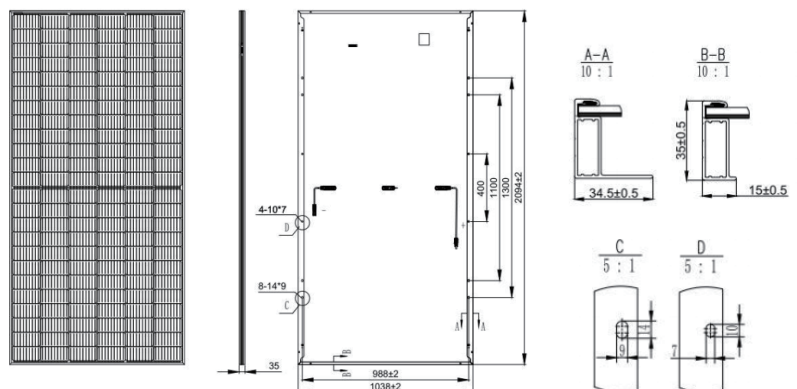
I-V Curves of SSP450QH7H at different irradiance



I-V Curves of SSP450QH7H at different cell temperature



Module Size



Operating Conditions

Max System Voltage	DC1500V(IEC)
Max Fuse Rated Current	20A
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