

Benchmark II SPP295-320P60

295-320W MWT Module

Poly(Cast-Mono) 60 Cells

19.7%
Module efficiency up to 19.7%

Benchmark MWT PV Module

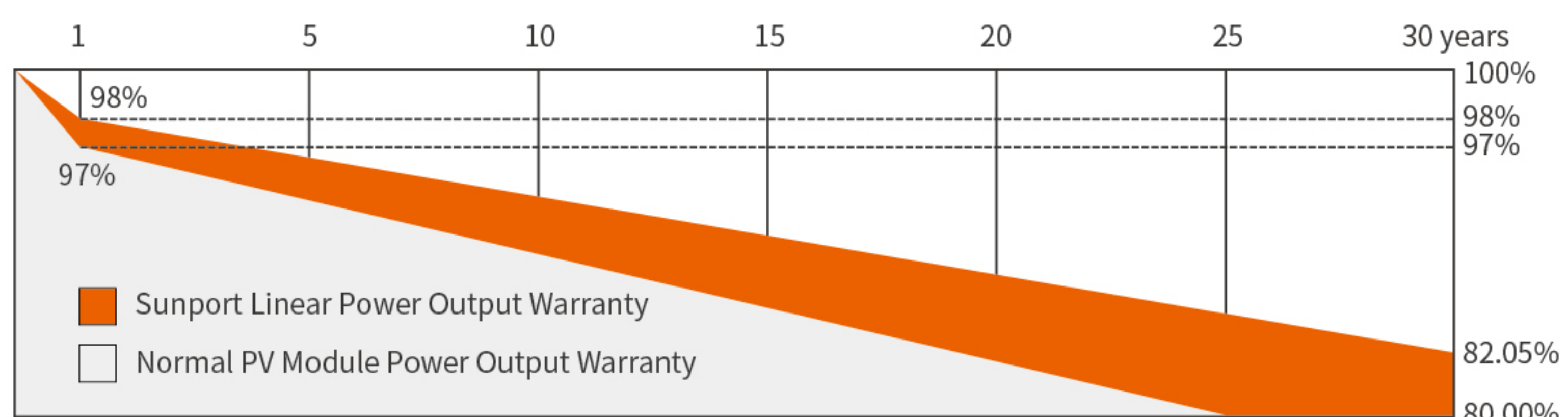
- Higher Efficiency**
The highest efficiency of the series is up to 19.7%.
- Higher Yield**
Higher power generation on the same installation.
- Anti-PID**
Certified for Anti-PID under 85°C/85%RH, for 288hrs.
- Lower Degradation**
At least 98% of the initial effective output in the 1st year and 82% in the 30th year.
- Corrosion-Resistant**
Certified for Ammonia Resistance and Salt Mist Corrosion.
- Heat-Resistant**
Improved temperature coefficient as low as -0.36%/°C.

Reinsurance Coverage for 30 Years

12year
Quality
Warranty

30year
Performance
Warranty

Insured by PICC and LLOYD'S



※1st year degradation less than 2%, 30 years linear power output 82% guaranteed.

Comprehensive Qualifications & Certifications

- ★IEC 61215, IEC 61730, IEC 61701, IEC 62716, IEC 60068-2-68.
- ★ISO 9001:2015 Quality Management System
- ★OHSAS 18001:2007 Occupation Health Safety Management System
- ★CQC&CGC Top Runner Advanced Technology Certification (4A class)
- ★ISO 14001:2015 Environment Management System
- ★ TUV NORD and UK NQA Quality System Certification



Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SPP295P60	SPP300P60	SPP305P60	SPP310P60	SPP315P60	SPP320P60
Max-Power(Pm)	W	295	300	305	310	315	320
Power Tolerance	%	0~+3%					
Max-Power Voltage(Vm)	V	31.4	31.6	31.8	32.0	32.2	32.4
Max-Power Current(Im)	A	9.40	9.50	9.60	9.69	9.79	9.88
Open-Circuit Voltage(Voc)	V	38.8	39.0	39.2	39.4	39.6	39.8
Short-Circuit Current(Isc)	A	9.90	9.98	10.06	10.14	10.22	10.30
Module Efficiency(ηm)	%	18.1	18.4	18.7	19.1	19.4	19.7
STC:AM=1.5, Irradiation1000W/m ² , Module Temperature25°C							

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP295P60	SPP300P60	SPP305P60	SPP310P60	SPP315P60	SPP320P60
Max-Power(Pm)	W	220	224	228	232	236	240
Max-Power Voltage(Vm)	V	28.7	28.9	29.1	29.3	29.5	29.7
Max-Power Current(Im)	A	7.67	7.76	7.84	7.93	8.01	8.09
Open-Circuit Voltage(Voc)	V	35.7	35.8	35.9	36.0	36.1	36.2
Short-Circuit Current(Isc)	A	8.07	8.15	8.23	8.31	8.39	8.47
NMOT: Irradiation800W/m ² , ambient temperature20°C,Wind Speed1m/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

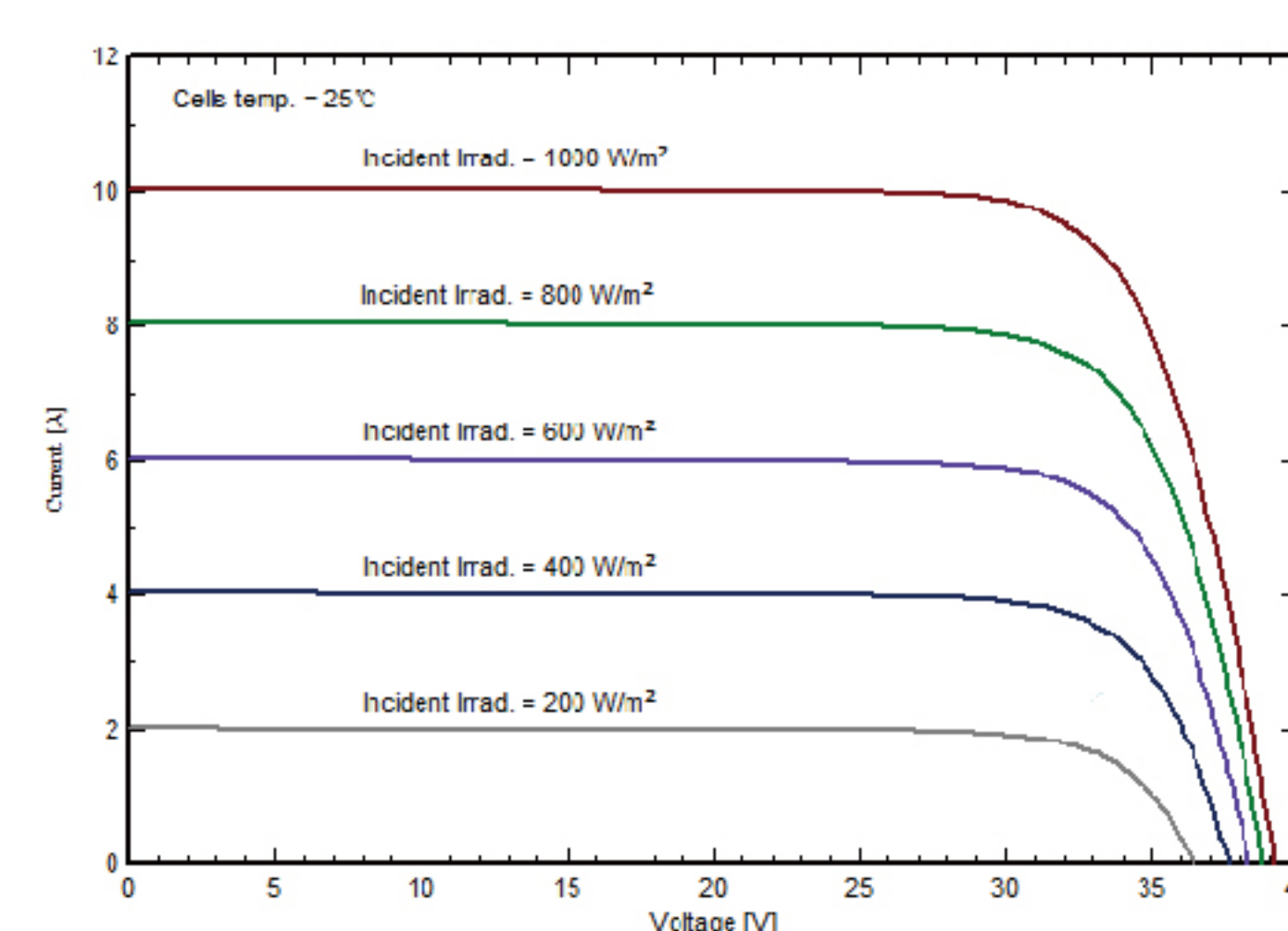
Transportation	Container Size	Quantity(pcs)	Quantity(per pallet)
Container	40' HC	868/924	31

Mechanical Property

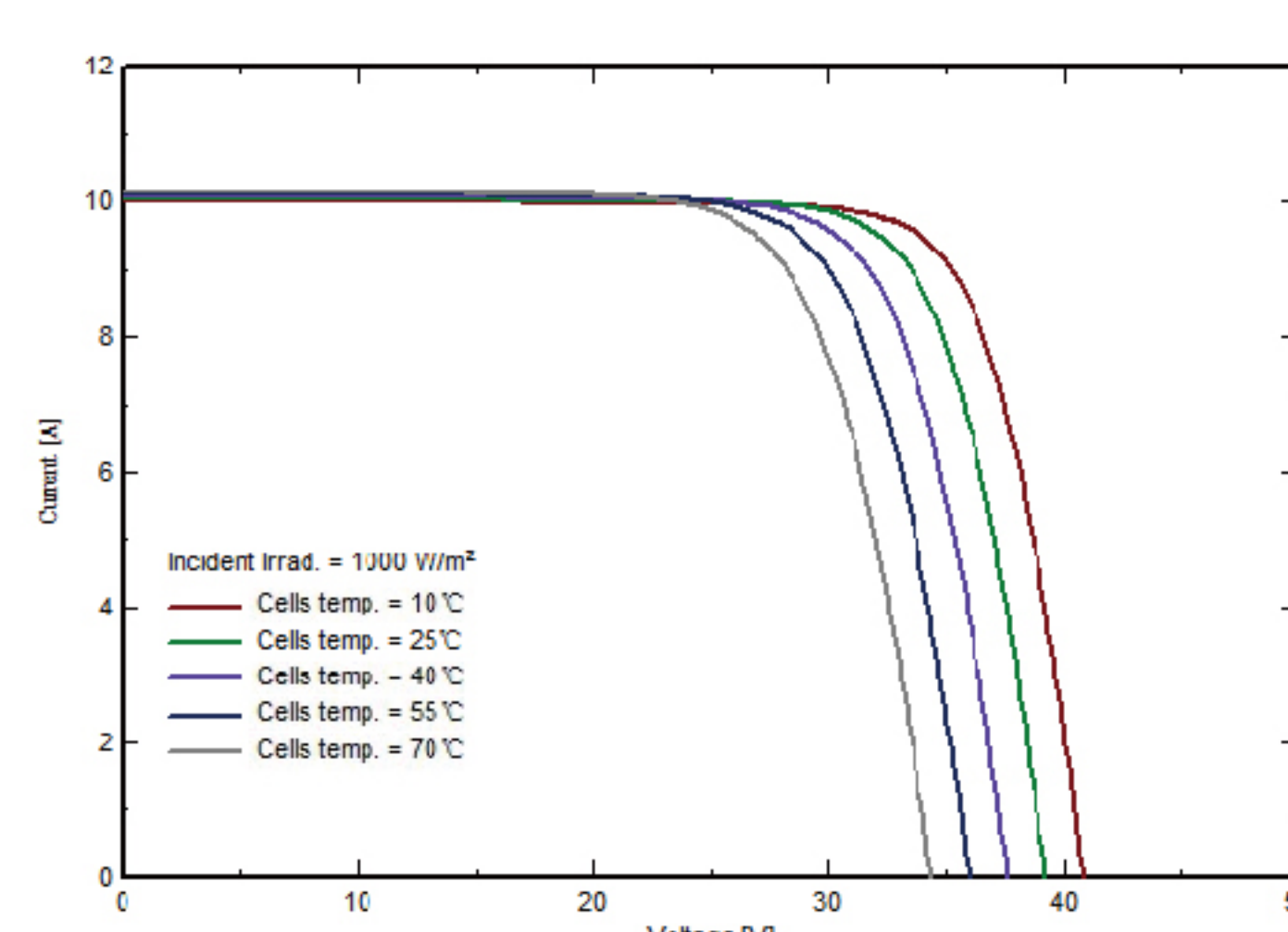
Dimension(L×W×H)	1640mmx992mmx35mm
Weight	18.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	60(10x6)/Poly(Cast-Mono)/158.75mm
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP67&IP68
Cable	1000mm / 4mm ²
Connector	MC4 Compatible

I-V Curve

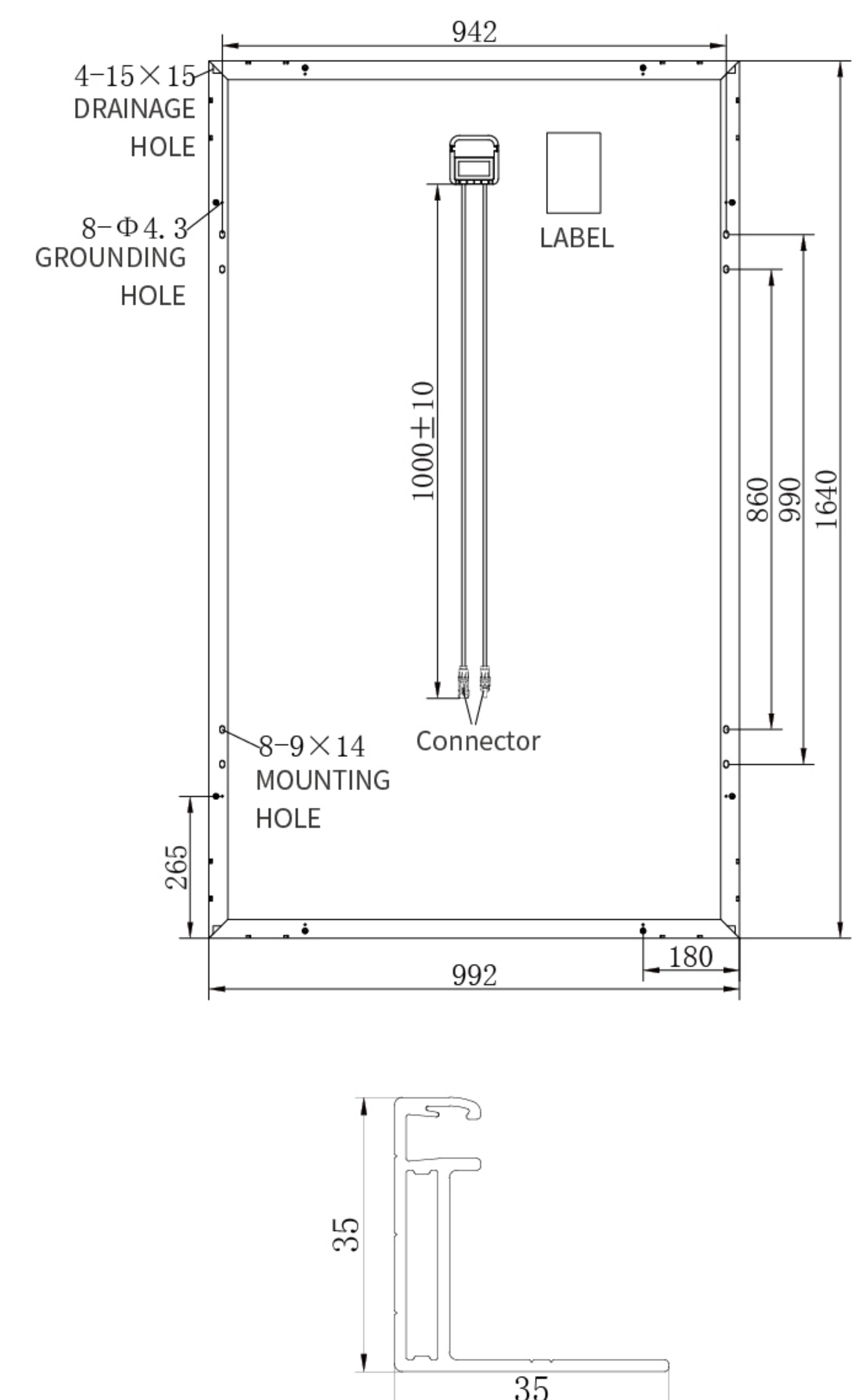
I-V Curve at different irradiation (SPP305P60)



I-V Curve at different temperature (SPP305P60)



Module Size



Operating Conditions

Max System Voltage	1000V(TUV)
Max Fuse Rated Current	15A
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