



Benchmark II SPP300-330M60

300-330W MWT Module

Mono 60 Cells

Australian Version

Manufactured in China

20.3%

Module efficiency up to 20.3%

MWT Solar Cell

- New cell structure and different manufacturing process.
- No bus-bar on the front. 3% less shadow and better use of sunlight.
- Effectively avoid the micro crack caused by the pressure between cell edge and ribbon.
- Compatible with other cell types including PERC, HIT, Black Silicon etc.

Insured by PICC and LLOYD'S

PICC **LLOYD'S**

Comprehensive Qualifications & Certifications

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



Benchmark MWT PV Module



Higher Efficiency

The highest efficiency of the series is up to 20.3%.



Higher Yield

Higher power generation on the same installation.



Lower Degradation

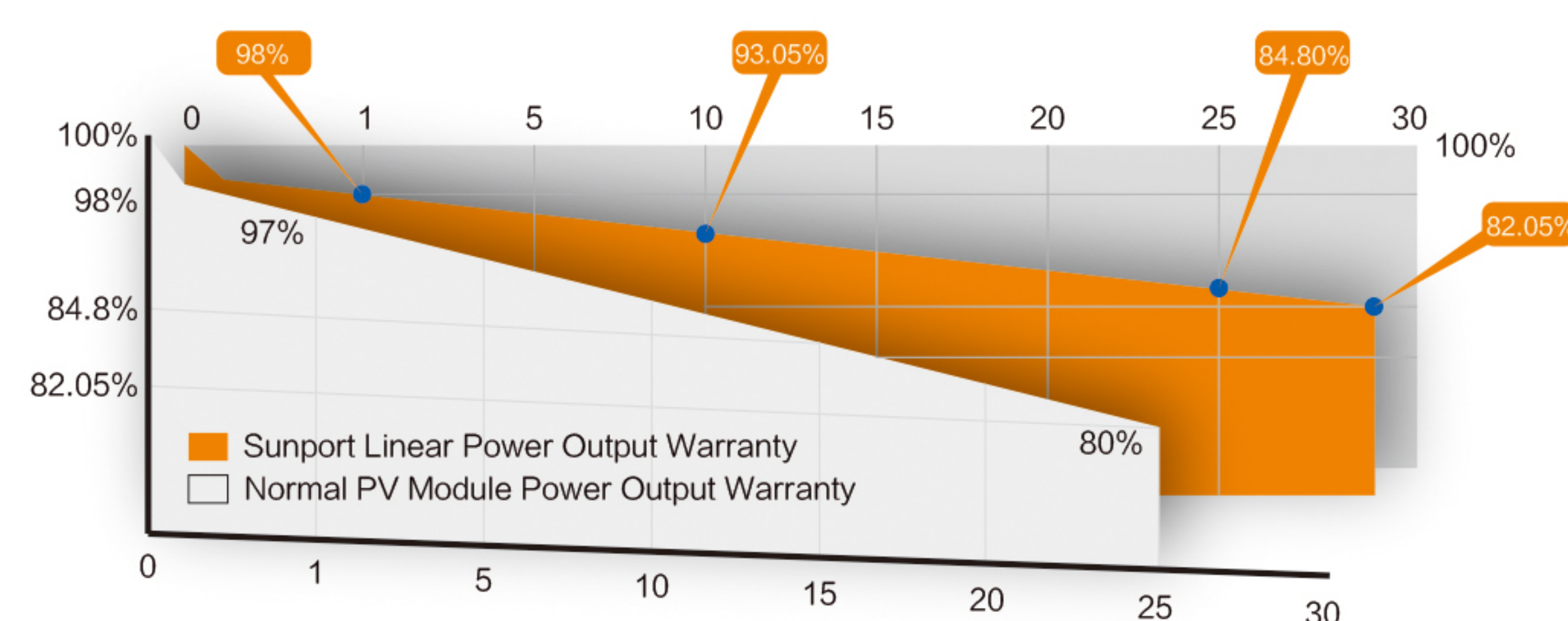
At least 98 % of the initial effective output at the 1st year and 80% at the 30th year.



Heat-Resistant

Remain peak performance in hot days thanks to the improved temperature coefficient as low as $-0.36\%/^{\circ}\text{C}$.

30 Years Performance Warranty



Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SPP300M60	SPP305M60	SPP310M60	SPP315M60	SPP320M60	SPP325M60	SPP330M60
Max-Power(Pm)	W	300	305	310	315	320	325	330
Power Tolerance	%	0~+3%						
Max-Power Voltage(Vm)	V	31.6	31.8	32.0	32.2	32.4	32.6	32.8
Max-Power Current(I _m)	A	9.50	9.60	9.69	9.79	9.88	9.97	10.07
Open-Circuit Voltage(V _{oc})	V	38.8	39.0	39.2	39.4	39.6	39.8	40.0
Short-Circuit Current(I _{sc})	A	10.04	10.12	10.20	10.28	10.36	10.44	10.52
Module Efficiency(η _m)	%	18.4	18.7	19.1	19.4	19.7	20.0	20.3

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

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP300M60	SPP305M60	SPP310M60	SPP315M60	SPP320M60	SPP325M60	SPP330M60
Max-Power(Pm)	W	224	228	232	236	240	244	248
Max-Power Voltage(Vm)	V	28.9	29.1	29.3	29.5	29.7	29.9	30.1
Max-Power Current(I _m)	A	7.76	7.84	7.93	8.01	8.09	8.17	8.25
Open-Circuit Voltage(V _{oc})	V	35.7	35.8	35.9	36.0	36.1	36.2	36.3
Short-Circuit Current(I _{sc})	A	8.19	8.27	8.35	8.43	8.51	8.59	8.67

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 V _{oc}	-0.28%/°C
Temperature coefficient of I _{sc}	0.06%/°C

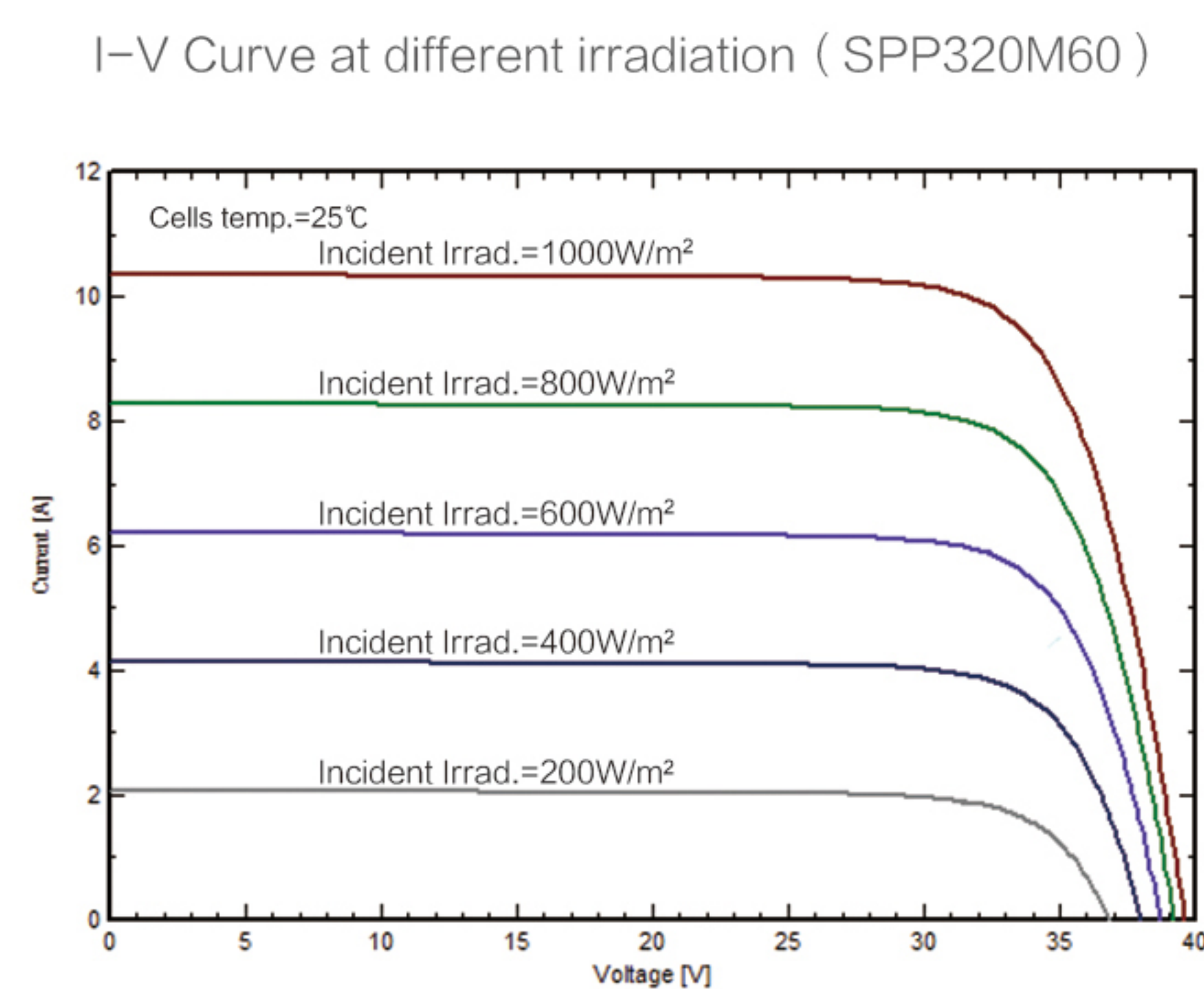
Package

Container Size	Quantity(pcs)	Quantity(pallet)
20' GP	360	12
40' GP	840	28
40' HC	840	28

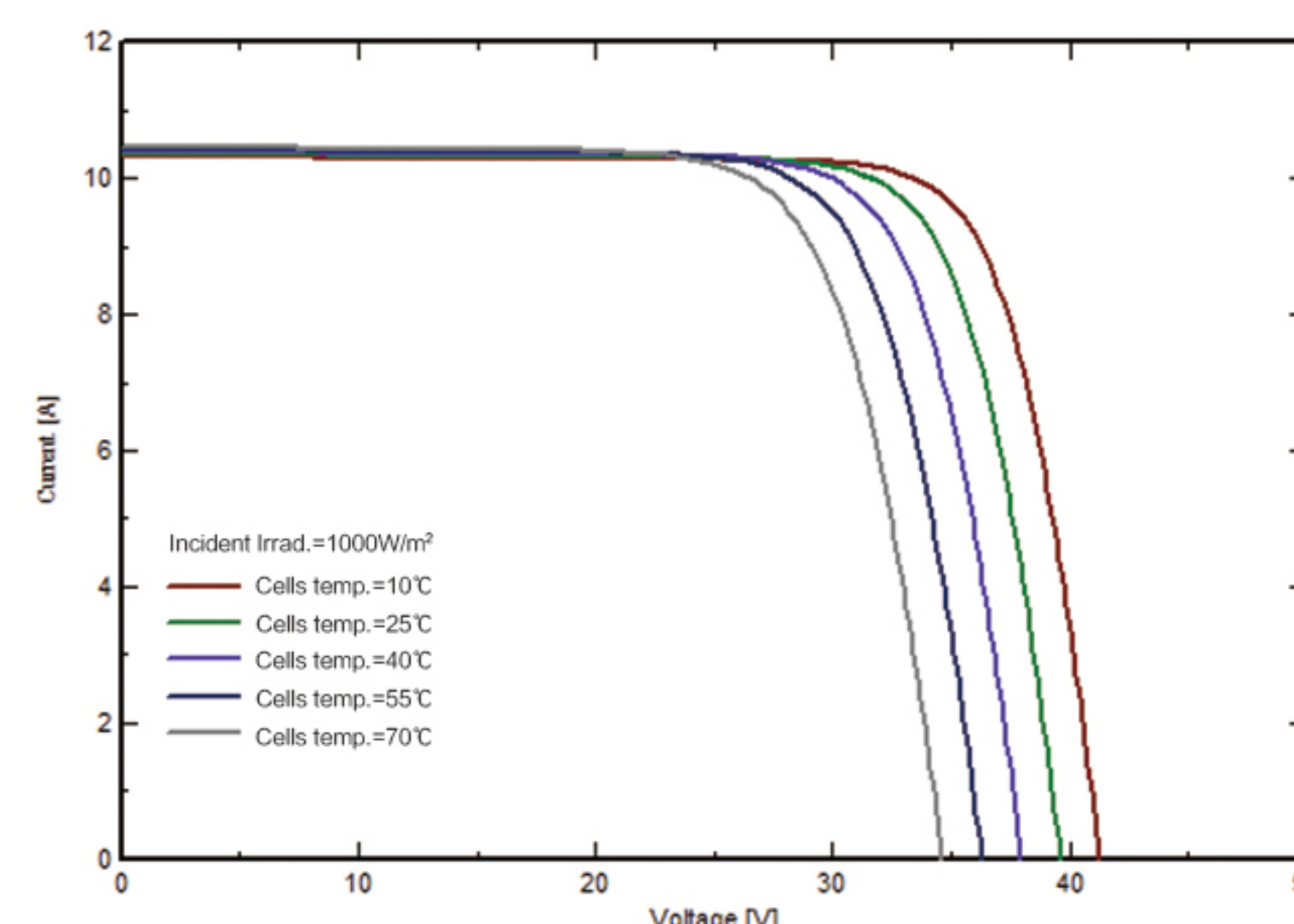
Mechanical Property

Dimension(L × W × H)	1640mmx992mmx35mm
Weight	18.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	60(10x6)/Mono/ 6inches
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP65 & IP67
Cable	1000mm / 4mm ²
Connector	TL-CABLE01

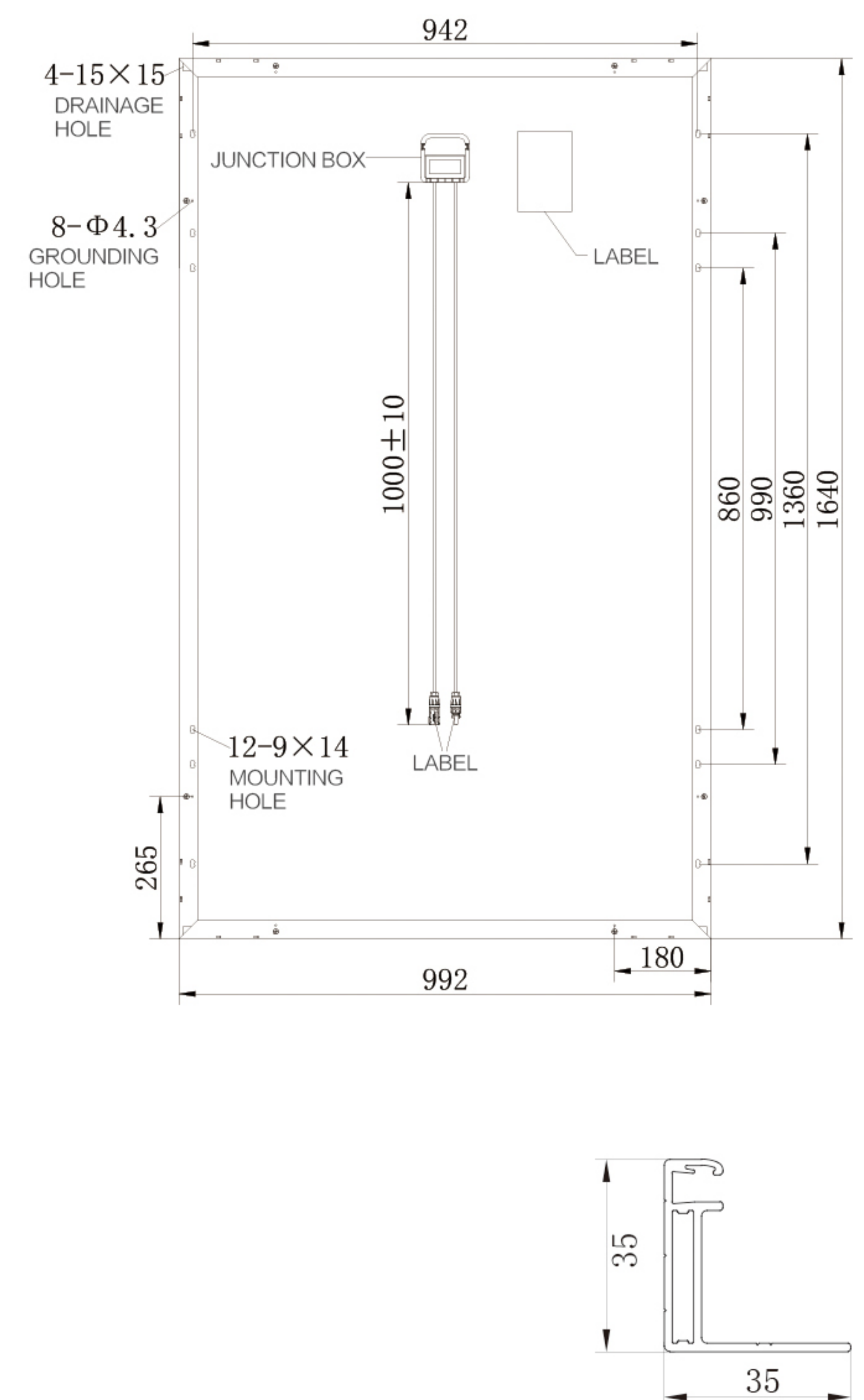
I-V Curve



I-V Curve at different temperature (SPP320M60)



Module Size



Operating Conditions

Max System Voltage	DC1000V(TUV)
Max Fuse Rated Current	15A
Operating Temperature Range	-40°C ~ +85°C
Mechanical Load	3600Pa/2400Pa
Max Allowable Hail Load	φ 25mm hail, from 1m of distance at 23 m/s
Application Class	Class A

