



# Benchmark II SPP325-345D60H

## 325-345W MWT Module

### Cast-Mono 60 Cells

# 20.2%

Module efficiency up to 20.2%

### Benchmark MWT PV Module

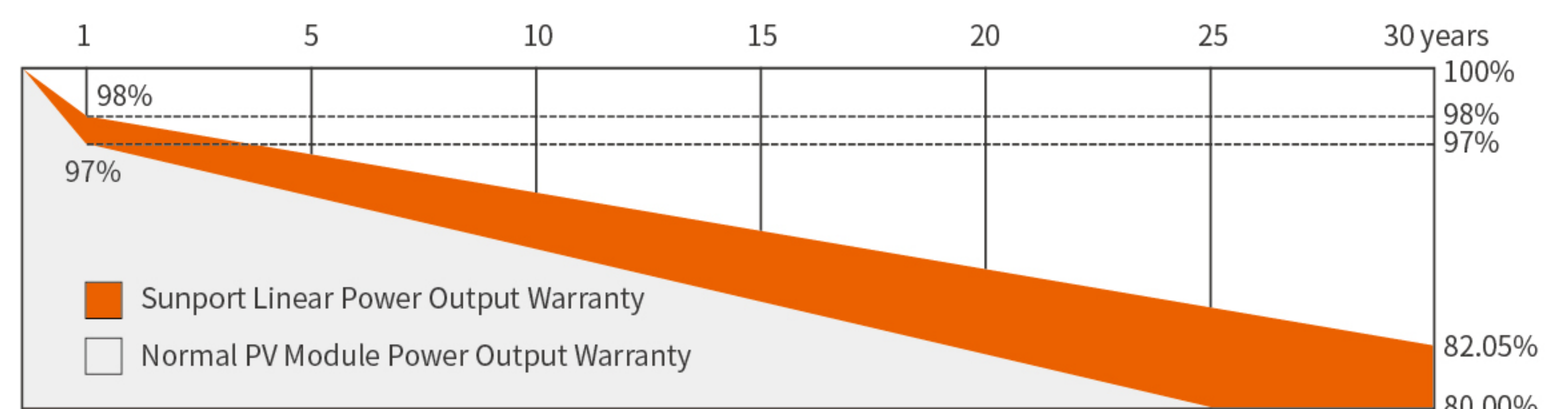
- Higher Efficiency**  
 The highest efficiency of the series is up to 20.2%.
- Higher Yield**  
 Higher power generation on the same installation.
- Anti-PID**  
 Certified for Anti-PID under 85°C/85%RH, for 288hrs.
- Lower Degradation**  
 At least 98% of the initial effective output in the 1st year and 82% in the 30th year.
- Corrosion-Resistant**  
 Certified for Ammonia Resistance and Salt Mist Corrosion.
- Heat-Resistant**  
 Improved temperature coefficient as low as  $-0.36\%/^{\circ}\text{C}$ .

### Reinsurance Coverage for 30 Years



Insured by PICC and LLOYD'S

# PICC 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	SPP325D60H	SPP330D60H	SPP335D60H	SPP340D60H	SPP345D60H
Max-Power(Pm)	W	325	330	335	340	345
Power Tolerance	%			0~+3%		
Max-Power Voltage(Vm)	V	31.8	32.0	32.2	32.4	32.6
Max-Power Current(Im)	A	10.22	10.31	10.41	10.50	10.59
Open-Circuit Voltage(Voc)	V	40.0	40.2	40.4	40.6	40.8
Short-Circuit Current(Isc)	A	10.64	10.72	10.80	10.88	10.96
Module Efficiency(ηm)	%	19.0	19.3	19.6	19.9	20.2

STC:AM=1.5, Irradiation1000W/m<sup>2</sup>, Module Temperature25°C

## Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP325D60H	SPP330D60H	SPP335D60H	SPP340D60H	SPP345D60H
Max-Power(Pm)	W	244	248	252	256	260
Max-Power Voltage(Vm)	V	29.1	29.3	29.5	29.7	29.9
Max-Power Current(Im)	A	8.38	8.46	8.54	8.62	8.70
Open-Circuit Voltage(Voc)	V	36.6	36.8	37	37.2	37.4
Short-Circuit Current(Isc)	A	8.73	8.80	8.87	8.94	9.00

NMOT: Irradiation800W/m<sup>2</sup>, 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

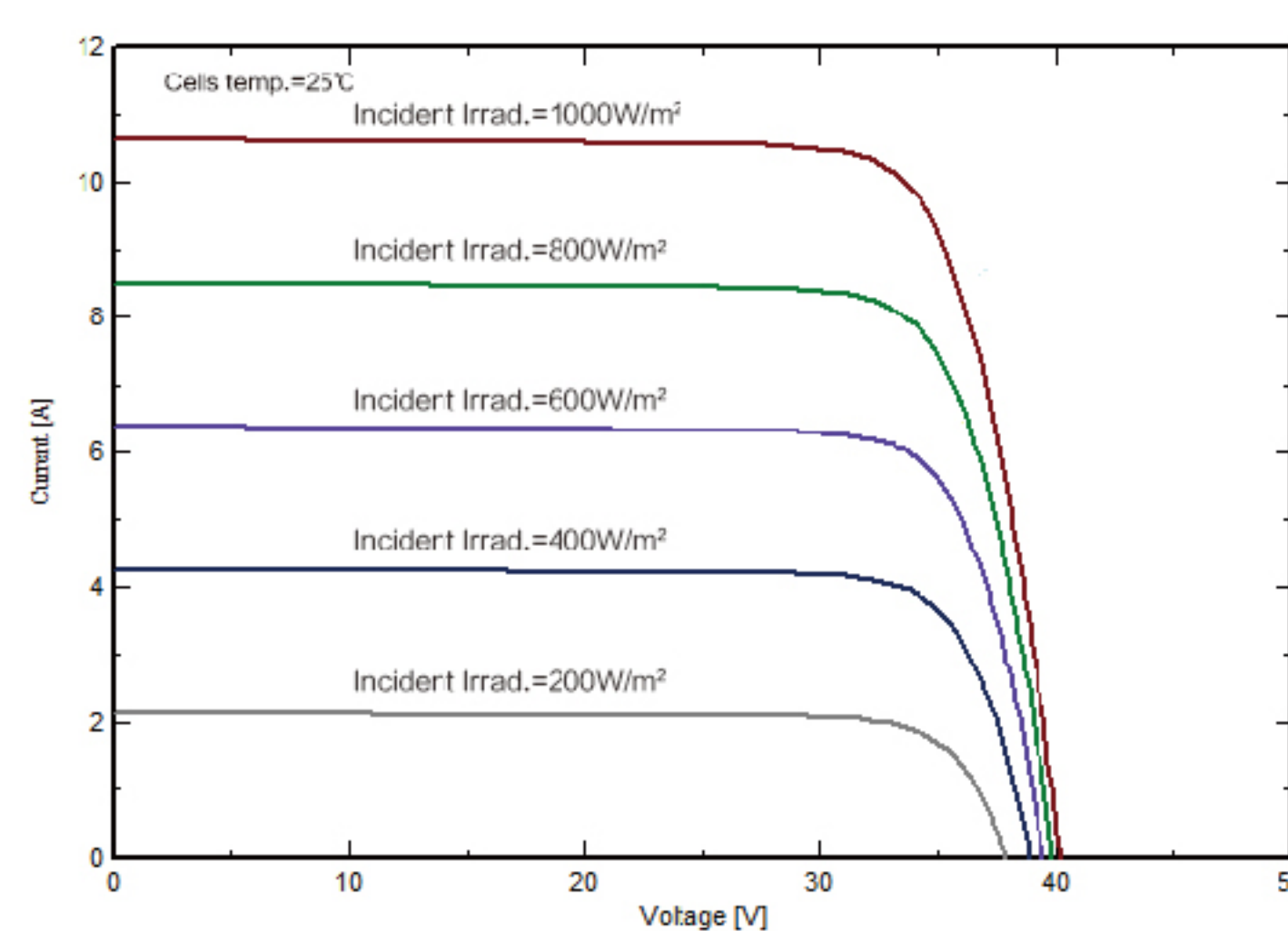
Dimension(L×W×H)	1680mmx1016mmx35mm
Weight	19.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	60(10x6)/Cast-Mono/162.75mm
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP67&IP68
Cable	1000mm / 4mm <sup>2</sup>
Connector	MC4 Compatible

## Operating Conditions

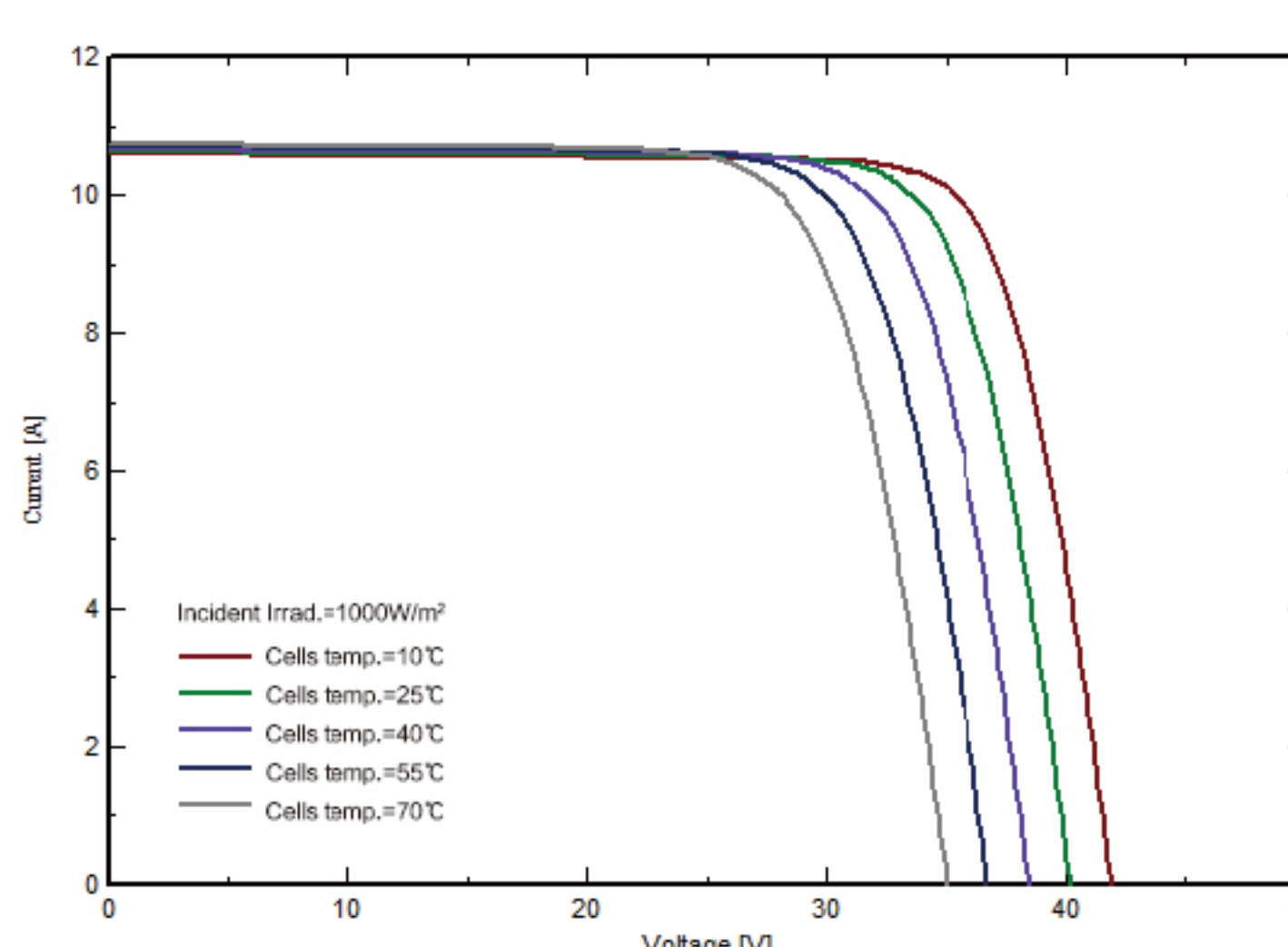
Max System Voltage	1500V(TUV)
Max Fuse Rated Current	15A
Operating Temperature Range	-40°C~+85°C
Mechanical Load	5400Pa (front) /2400Pa (rear)
Max Allowable Hail Load	φ25mm hail, from 1m of distance at 23 m/s
Application Class	Class A

## I-V Curve

I-V Curve at different irradiation (SPP330D60H)



I-V Curve at different temperature (SPP330D60H)



## Module Size

