



Benchmark II SPP395-420N72H

395-420W MWT Module

Mono 72 Cells

20.61%

Module efficiency up to 20.61%

Benchmark MWT PV Module

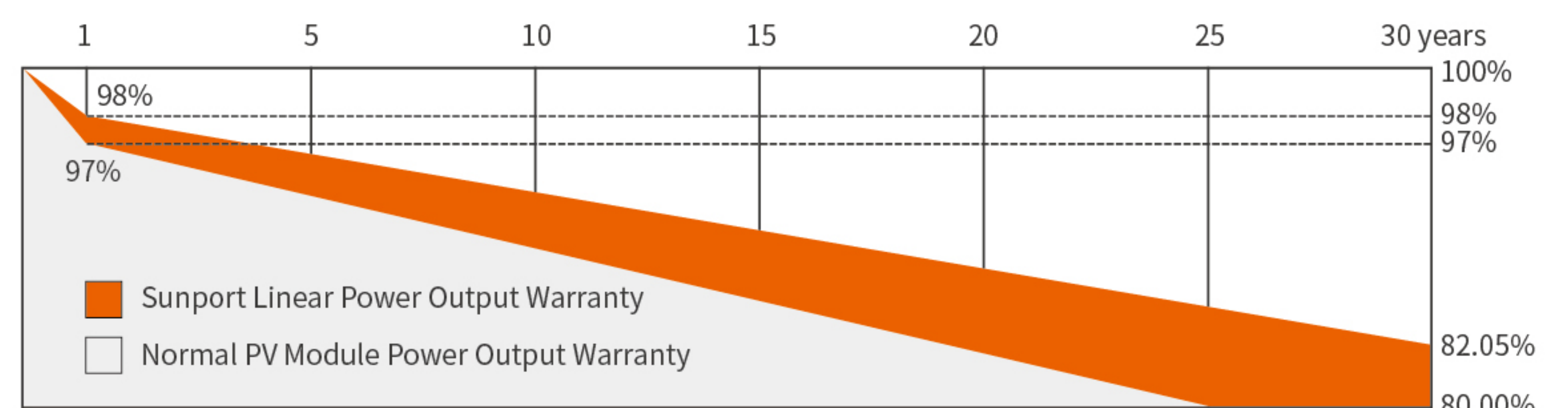
- Higher Efficiency**
 The highest efficiency of the series is up to 20.61%.
- Higher Yield**
 Higher power generation on the same installation.
- Anti-PID**
 Certified for Anti-PID under 85°C/85%RH, for 288hrs.
- Lower Degradation**
 At least 98% of the initial effective output in the 1st year and 82% 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	SPP395N72H	SPP400N72H	SPP405N72H	SPP410N72H	SPP415N72H	SPP420N72H
Max-Power(Pm)	W	395	400	405	410	415	420
Power Tolerance	%	0~+3%					
Max-Power Voltage(Vm)	V	38.9	39.1	39.3	39.5	39.7	39.9
Max-Power Current(Im)	A	10.16	10.23	10.31	10.38	10.46	10.53
Open-Circuit Voltage(Voc)	V	47.5	47.7	47.9	48.1	48.3	48.5
Short-Circuit Current(Isc)	A	10.53	10.59	10.65	10.71	10.77	10.83
Module Efficiency(ηm)	%	19.38	19.63	19.87	20.12	20.36	20.61

STC:AM=1.5, Irradiation1000W/m², Module Temperature25°C

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Spec/Model	Unit	SPP395N72H	SPP400N72H	SPP405N72H	SPP410N72H	SPP415N72H	SPP420N72H
Max-Power(Pm)	W	295	299	303	307	311	315
Max-Power Voltage(Vm)	V	35.4	35.6	35.8	36.0	36.2	36.4
Max-Power Current(Im)	A	8.33	8.40	8.46	8.53	8.59	8.66
Open-Circuit Voltage(Voc)	V	43.3	43.5	43.7	43.9	44.1	44.3
Short-Circuit Current(Isc)	A	8.66	8.72	8.78	8.84	8.90	8.96

NMOT: Irradiation800W/m², 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	20' GP	270	27
Container	40' HC	648/696	27

Mechanical Property

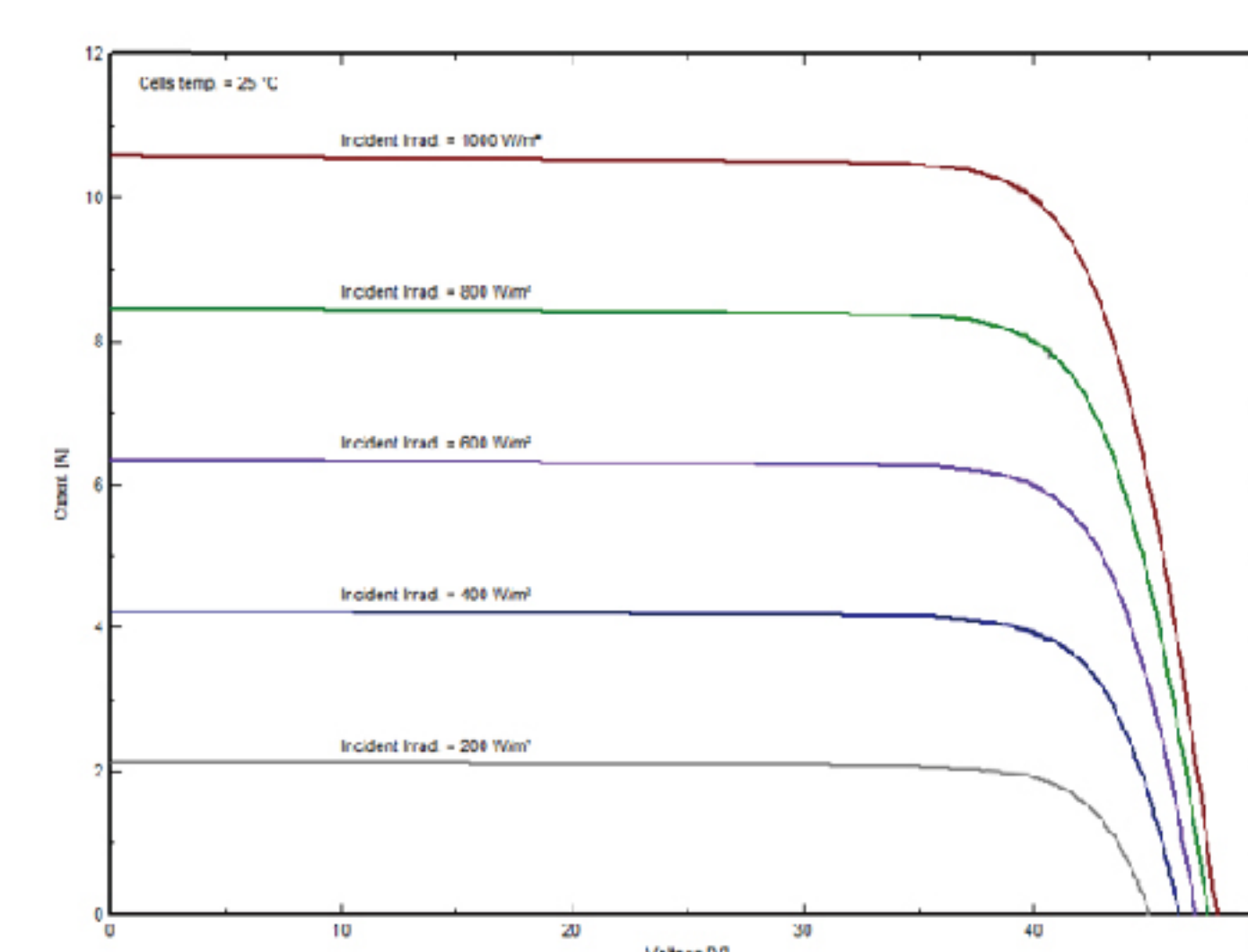
Dimension(L×W×H)	2006mmx1016mmx40mm
Weight	23.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	72(12x6)/Mono/162.75mm
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP67&IP68
Cable	1200mm / 4mm ²
Connector	MC4 Compatible

Operating Conditions

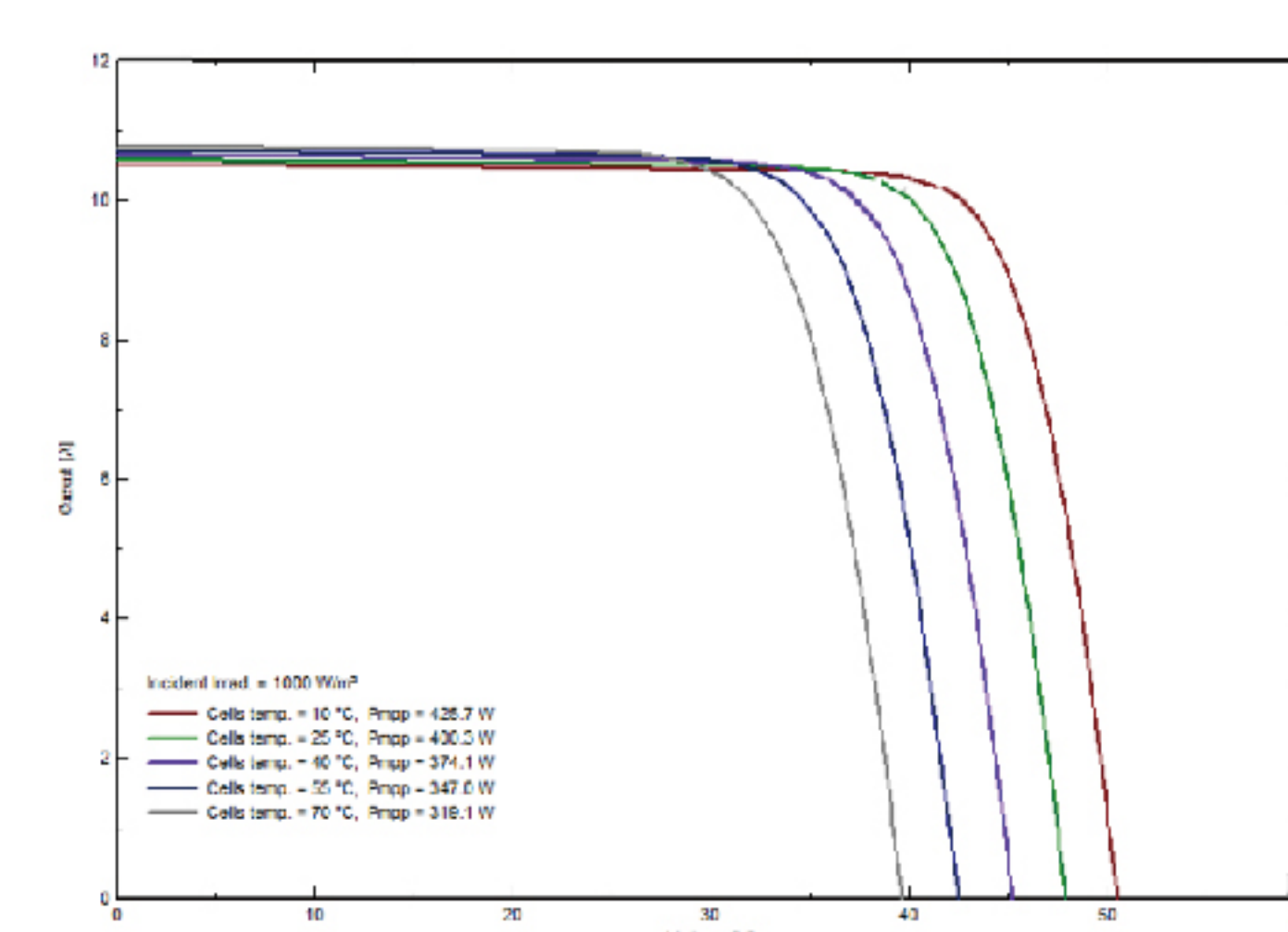
Max System Voltage	1500V(TUV)
Max Fuse Rated Current	20A
Operating Temperature Range	-40°C~+85°C
Mechanical Load	5400Pa (front) /2400Pa (rear)
Max Allowable Hail Load	φ25mm hail, from 1m of distance at 23 m/s
Application Class	Class A

I-V Curve

I-V Curve at different irradiation (SPP405N72H)



I-V Curve at different temperature (SPP405N72H)



Module Size

