

# Benchmark II SPP365-395M72B

## 365-395W MWT Black Module

### Mono 72 Cells

# 20.4%

Module efficiency up to 20.4%

## 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, IEC 61701, IEC 62716, IEC 60068-2-68.
- ★ 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 20.4%.



### Higher Yield

Higher power generation on the same installation.



### Lower Degradation

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



### Heat-Resistant

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



### Corrosion-Resistant

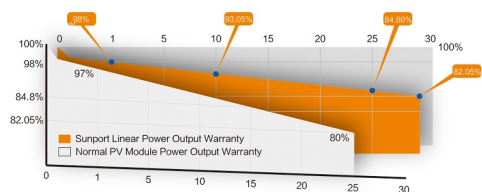
Certified for Ammonia Resistance and Salt Mist Corrosion to maximum severity level 6.



### Anti-PID

Certified for Anti-PID under  $85^{\circ}\text{C}/85\%\text{RH}$ , for 288hrs.

## 30 Years Performance Warranty



## Electrical Characteristics at Standard Test Conditions(STC)

Spec/Model	Unit	SPP365M72B	SPP370M72B	SPP375M72B	SPP380M72B	SPP385M72B	SPP390M72B	SPP395M72B
Max-Power(Pm)	W	365	370	375	380	385	390	395
Power Tolerance	%	0~+3%						
Max-Power Voltage(Vm)	V	38.1	38.3	38.5	38.7	38.9	39.2	39.4
Max-Power Current(I <sub>m</sub> )	A	9.59	9.67	9.75	9.83	9.90	9.96	10.03
Open-Circuit Voltage(Voc)	V	46.8	47.0	47.2	47.4	47.6	47.8	48.0
Short-Circuit Current(Isc)	A	10.03	10.09	10.15	10.21	10.27	10.34	10.41
Module Efficiency(η <sub>m</sub> )	%	18.8	19.1	19.3	19.6	19.8	20.1	20.4
STC:AM=1.5, Irradiation 1000W/m <sup>2</sup> , Module Temperature 25°C								

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

Spec/Model	Unit	SPP365M72B	SPP370M72B	SPP375M72B	SPP380M72B	SPP385M72B	SPP390M72B	SPP395M72B
Max-Power(Pm)	W	272	276	279	283	287	290	294
Max-Power Voltage(Vm)	V	34.8	35.0	35.1	35.3	35.5	35.6	35.8
Max-Power Current(I <sub>m</sub> )	A	7.82	7.89	7.95	8.02	8.09	8.15	8.22
Open-Circuit Voltage(Voc)	V	42.8	42.9	43.0	43.1	43.2	43.4	43.5
Short-Circuit Current(Isc)	A	8.19	8.25	8.31	8.37	8.43	8.50	8.55
NMOT: Irradiation 800W/m <sup>2</sup> , ambient temperature 20°C, Wind Speed 1m/s								

## Temperature Coefficient

Nominal Module Operating Temperature	43 ± 2°C
Temperature coefficient of P <sub>max</sub>	-0.36%/°C
Temperature coefficient of V <sub>oc</sub>	-0.28%/°C
Temperature coefficient of I <sub>sc</sub>	0.06%/°C

## Package

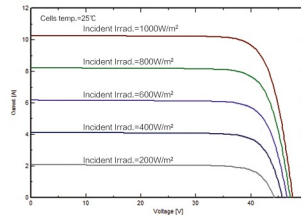
Container Size	Quantity(pcs)	Quantity(pallet)
20' GP	260	10
40' GP	624	24
40' HC	624	24

## Mechanical Property

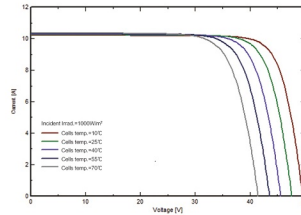
Dimension(L × W × H)	1956mm×992mm×40mm
Weight	22.5kg
Glass Type	High Transmittance Anti-reflective Coated Tempered Glass /3.2mm
Solar Cell	72(12x6)/Mono/6inches
Encapsulant	EVA
Frame	Anodized Aluminum Alloy / Silver
Junction Box	IP65 & IP67
Cable	1200mm / 4mm <sup>2</sup>
Connector	MC4 Compatible

## I-V Curve

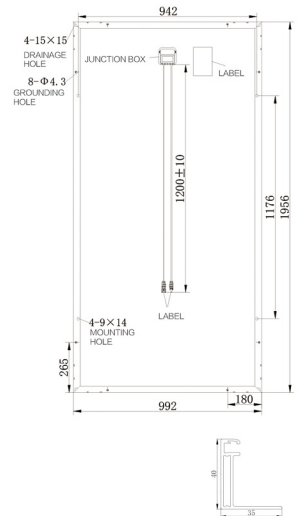
I-V Curve at different irradiation ( SPP385M72B )



I-V Curve at different temperature ( SPP385M72B )



## Module Size



## Operating Conditions

Max System Voltage	DC1000V(TUV)
Max Fuse Rated Current	15A
Operating Temperature Range	-40°C ~ +85°C
Mechanical Load	5400Pa/2400Pa
Max Allowable Hail Load	φ 25mm hail, from 1m of distance at 23 m/s
Application Class	Class A

