

# SunPlus Premium Performance 210 PERC Module (66 pcs)

## 645W-675W

### ◆ KEY FEATURES



#### Product Features

Energy density is increased by utilizing multi-busbar (MBB) and half-cut-cell technology, boosting the overall module efficiency upto 21.7%.



#### High Reliability

Passed the test under conditions three times higher than IEC standard, 12-year material warranty, 25-year power warranty.



#### PID-Resistant

The degradation caused by PID effect is minimized through state-of-the-art manufacture technology and strict material management.



#### Minimized Hidden Cracks

The adoption of MBB technology provides greater resistance to hidden cracks and improves busbar durability.



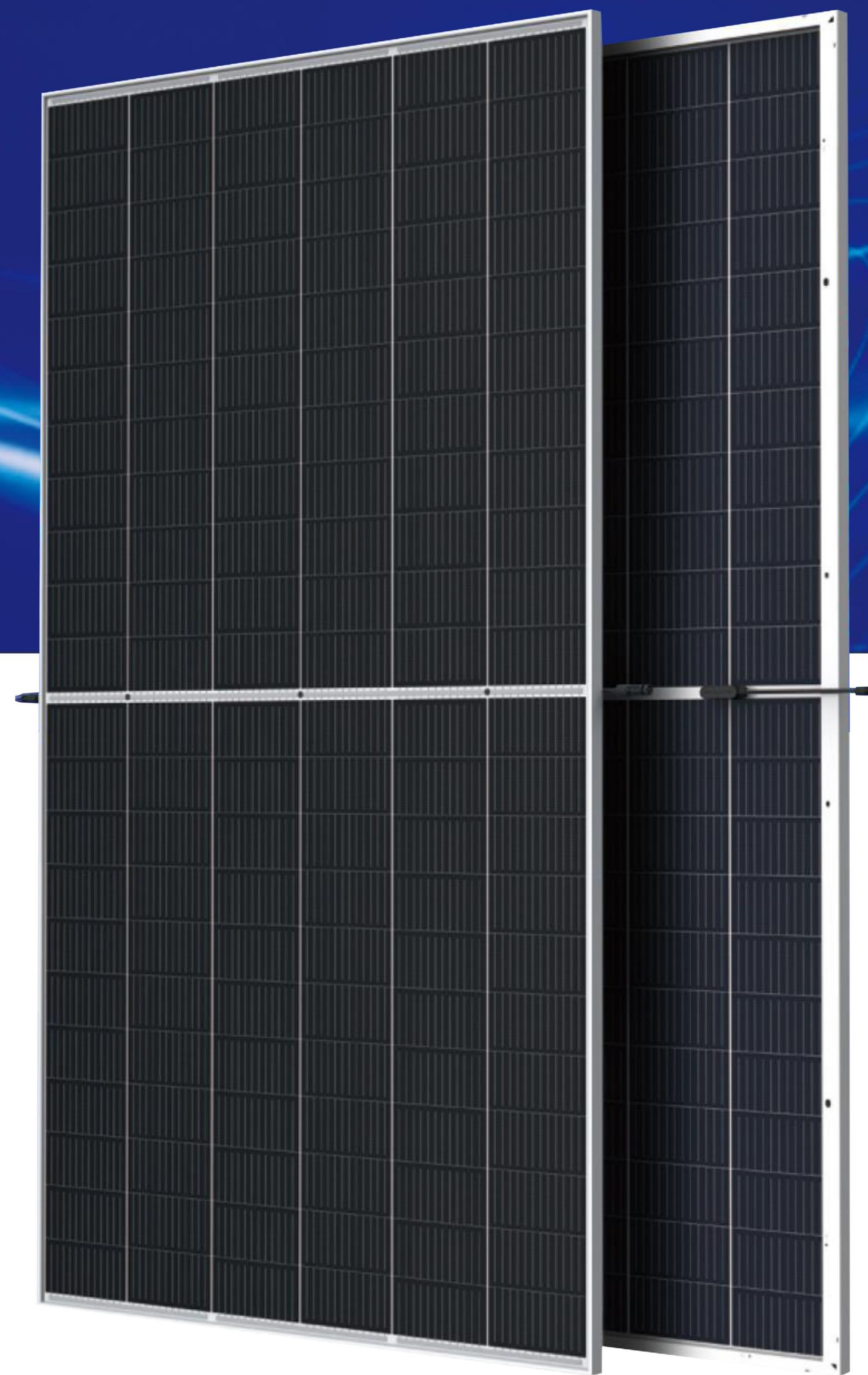
#### Superior Load Capacity

Certified for 2400 Pa wind load and 5400 Pa snow load.



#### Outstanding Low radiance Performance

Exceptional efficiency and output power under weak light conditions such as haze and cloudy weather.

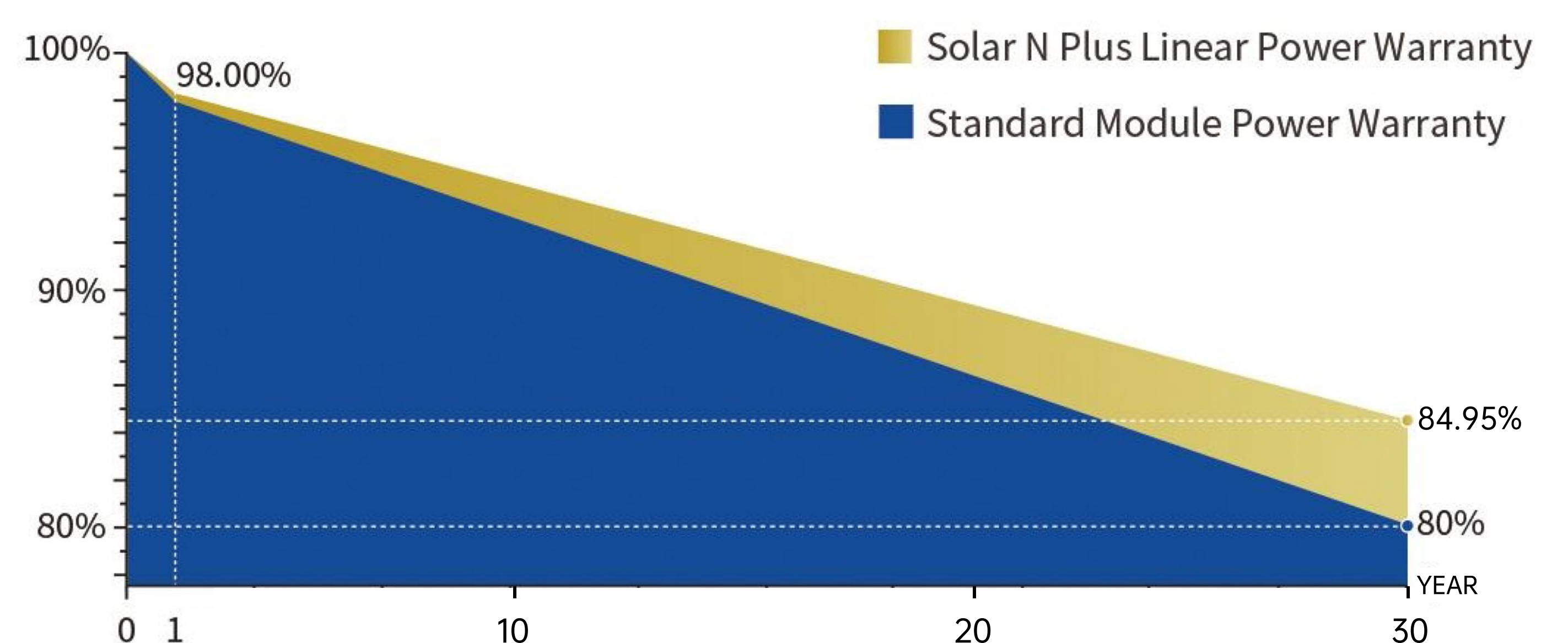


### ◆ Comprehensive Quality Management System and Product Certificates

- Passed various long-term reliability tests.
- EL tests are performed before and after lamination to ensure the reliability of the module.
- Adopted strict international standard management systems, including ISO 9001, ISO 14001, and OHSAS:18001.
- Passed various rigorous environmental tests, including salt spray, ammonia, and dust-proof tests according to IEC 61701, IEC 62716 and DIN EN 60068-2-68.



### ◆ Linear Performance Warranty





# SP-M12/132HG645W-675W

## Electrical Specification (STC)

Maximum Power	W	645	650	655	660	665	670	675
Power Output Tolerance	W	0 ~ +5W						
Maximum Power Voltage	V	37.2	37.4	37.6	37.8	38.0	38.2	38.4
Maximum Power Current	A	17.34	17.38	17.42	17.46	17.50	17.54	17.58
Open Circuit Voltage	V	45.0	45.2	45.4	45.6	45.8	46.0	46.2
Short Circuit Current	A	18.41	18.46	18.50	18.55	18.60	18.65	18.70
Module Efficiency	%	20.7	20.9	21.0	21.2	21.4	21.5	21.7

Irradiance 1000W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

## Electrical Specification (NOCT)

Maximum Power	W	488	492	496	500	504	509	513
Maximum Power Voltage	V	34.7	34.9	35.1	35.3	35.5	35.7	35.9
Maximum Power Current	A	14.05	14.09	14.13	14.18	14.22	14.27	14.31
Open Circuit Voltage	V	42.4	42.6	42.8	43.0	43.2	43.4	43.6
Short Circuit Current	A	14.81	14.85	14.88	14.92	14.96	15.00	15.04

Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## Mechanical Data

Dimensions of Module L*W*H	2385mmx1303mmx30mm
Number of Cells	132 pcs(6x22)/Mono/12BB(210mm)
Weight	38.7kg
Glass	High transparency solar glass 2.0mm
Frame	Silver, anodized aluminium alloy
J-Box	IP68
Cable	4.0mm <sup>2</sup> (0.006inches <sup>2</sup> ), 300mm(11.8inches)
Connector	MC Compatible

## Operating Conditions

Maximum System Voltage	DC1500V(TUV)
Max Series Fuse Rating	30A
Operational Temperature	-40°C~+85°C
Mechanical load	5400Pa/2400Pa
Max. hailstone impact(diameter/velocity)	Φ25mm hail, from 1 m of distance at 23 m/s
Application Class	Class A

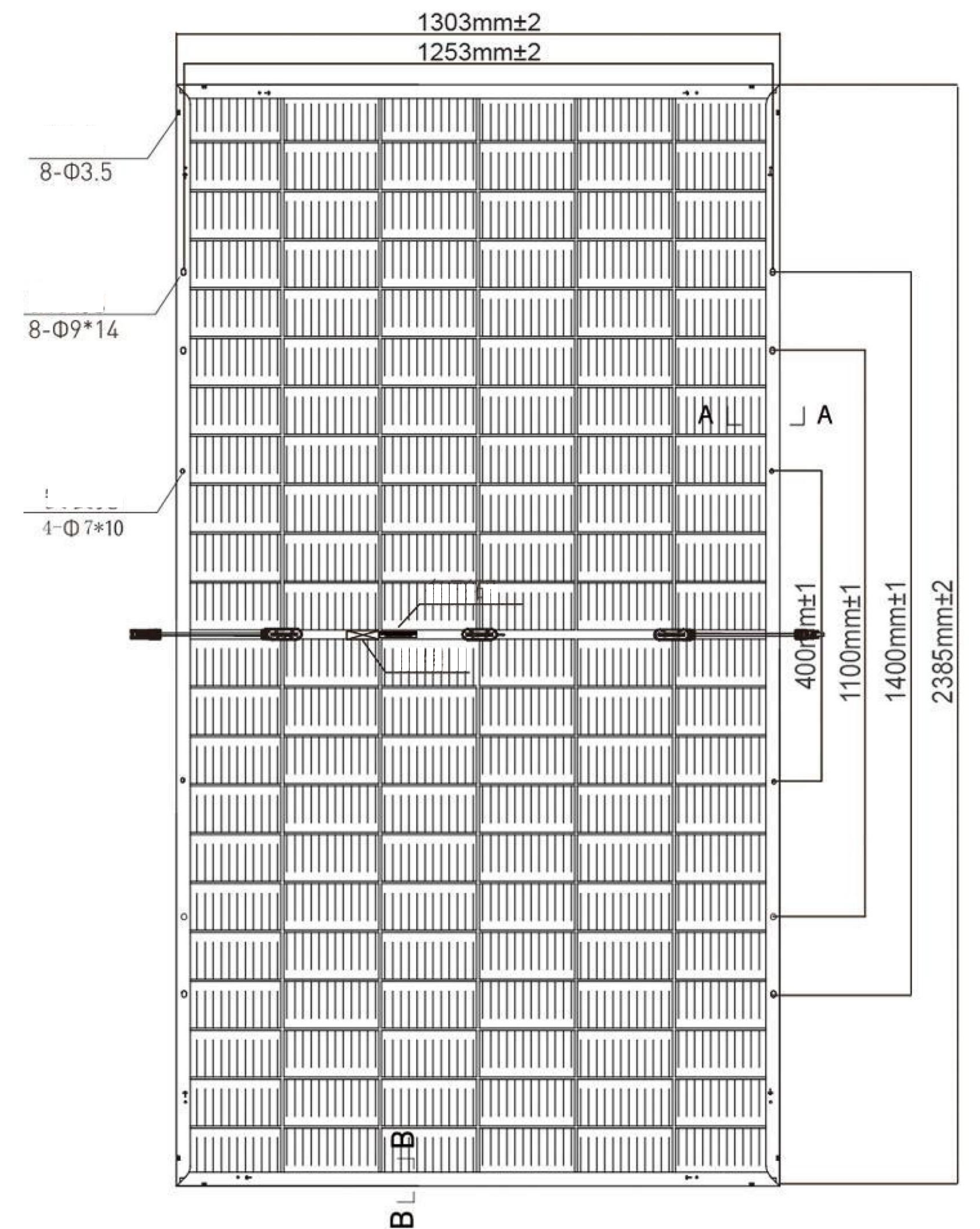
## Temperature Ratings

Nominal Operating Cell Temperature	43±2°C
Temperature Coefficient of Isc	-0.340%/°C
Temperature Coefficient of Voc	-0.250%/°C
Temperature Coefficient of P <sub>MAX</sub>	+0.040%/°C

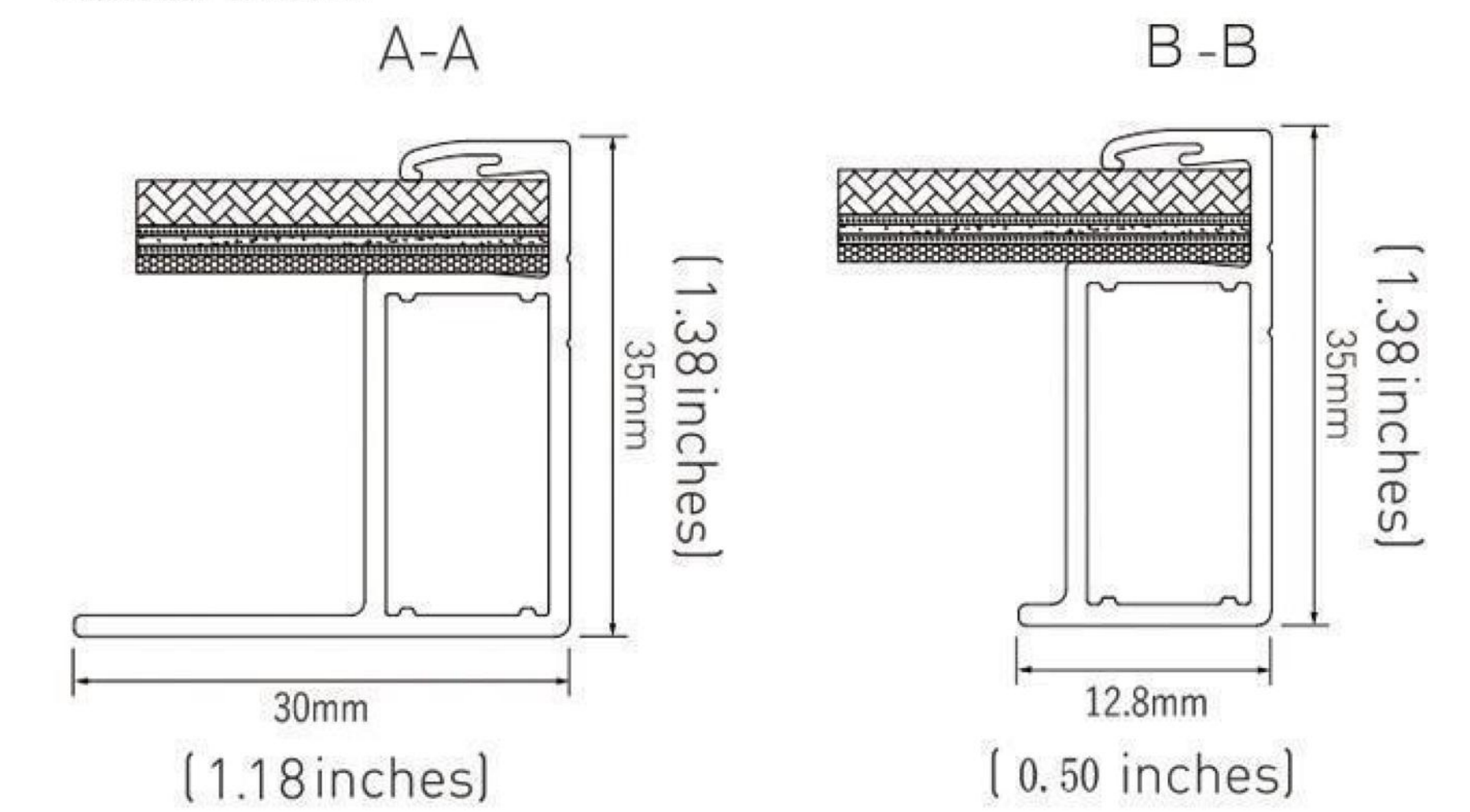
## Package

Module per box	36 pieces
Module per 40' container	648 pieces

## Module Dimension

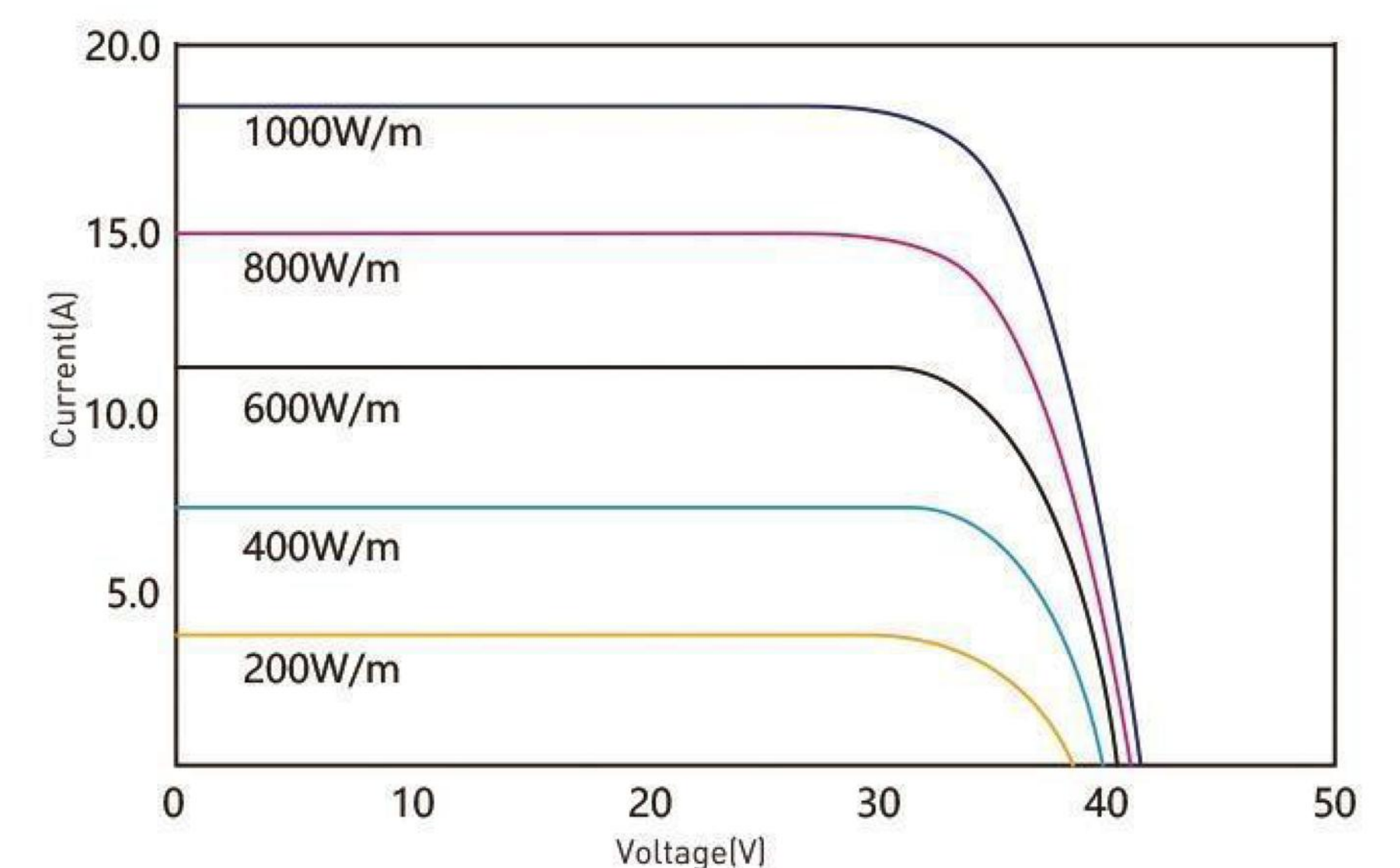


### Back View

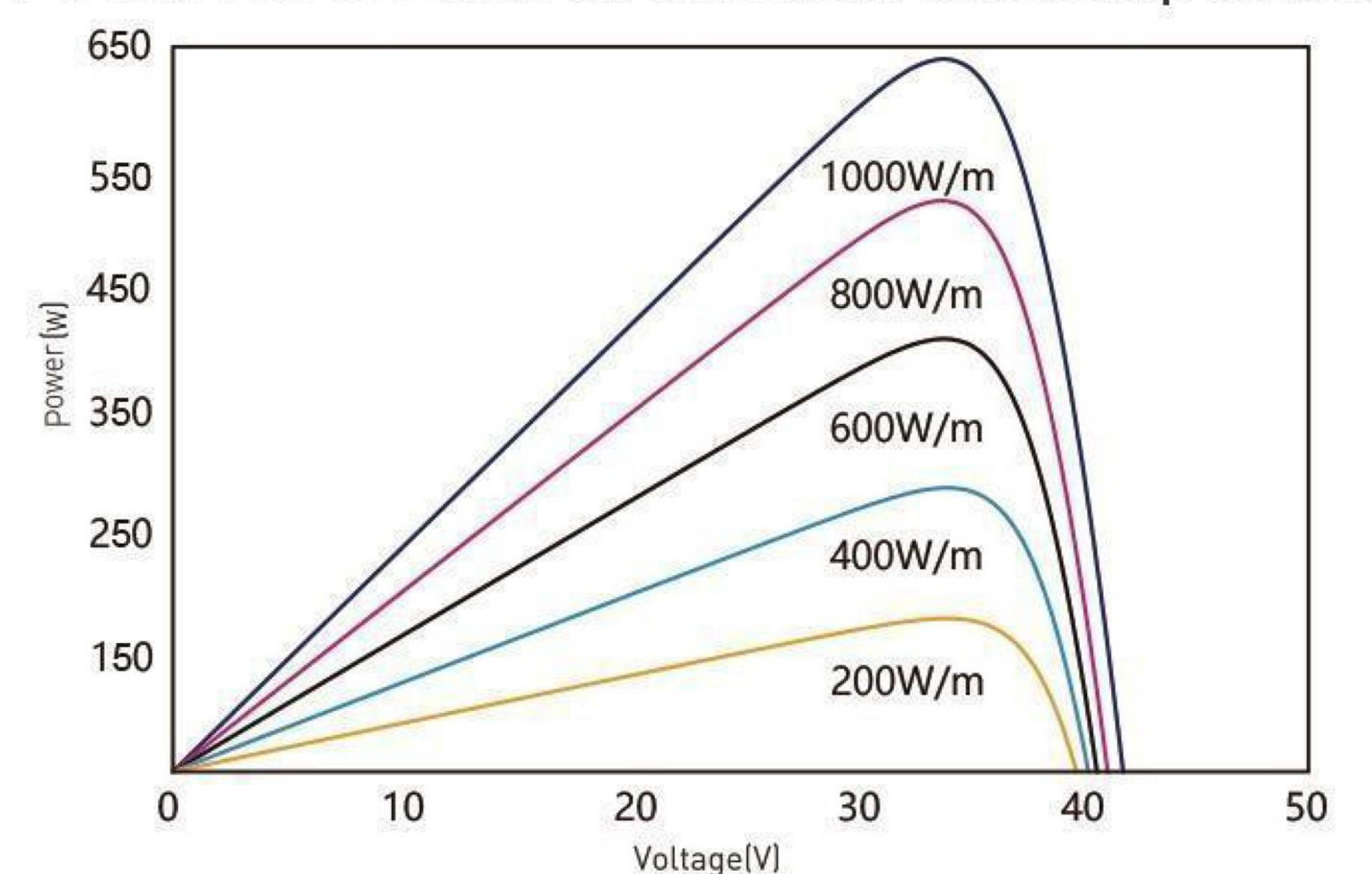


## I-V Curve

I-V Curves of 645W at different irradiance



I-V Curves of 645W at different cell temperature



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