

## YCxxxPSF72 M10/2

The best quality p-type mono cells and production process.  
Professional technology, reliable quality and power generation guarantee.



### Higher Durability

The multi-busbar design can decrease the risk of the cell micro-cracks and fingers broken.



### High Power Density

High conversion efficiency and more power output per square meter, by lower series resistance and improved light harvesting.



### Half-cell Design

Less energy loss caused by shading due to new cell string layout and split J-box, and lower cell connection power loss due to half-cell design.



### Power guarantee

First year attenuation  $\leq 2\%$ , 2-25 year annual attenuation  $\leq 0.55\%$



### Large size cell

The large cell design effectively increases module peak power and effectively reduces BOS costs, thereby reducing system costs.

**21.3%**

Module Efficiency

**12YEAR**

Product Warranty

**0~+5W**

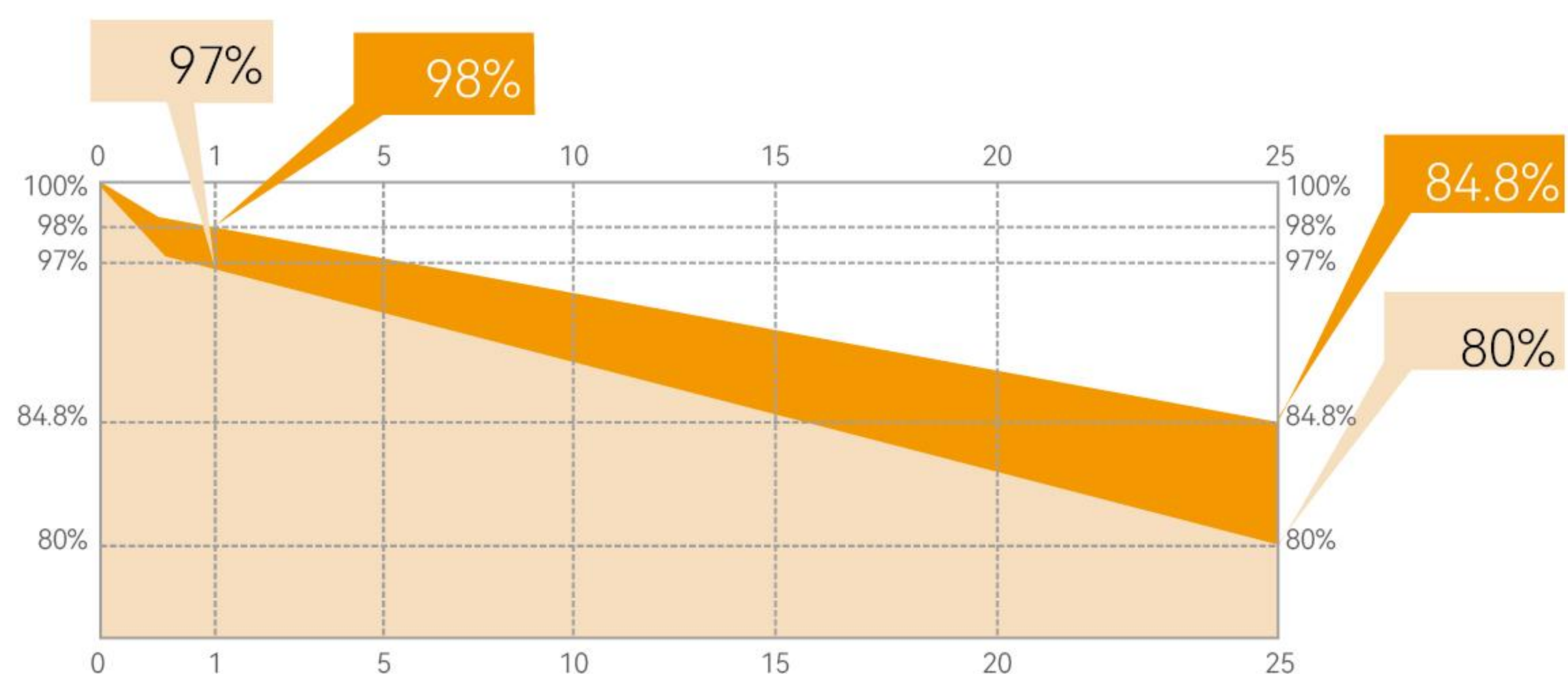
Power tolerance

#### QUALIFICATIONS & CERTIFICATES

IEC 61215, IEC 61730, IEC 62941: 2019, CE,  
ISO 9001:2015, ISO 14001:2015,  
ISO 45001:2018

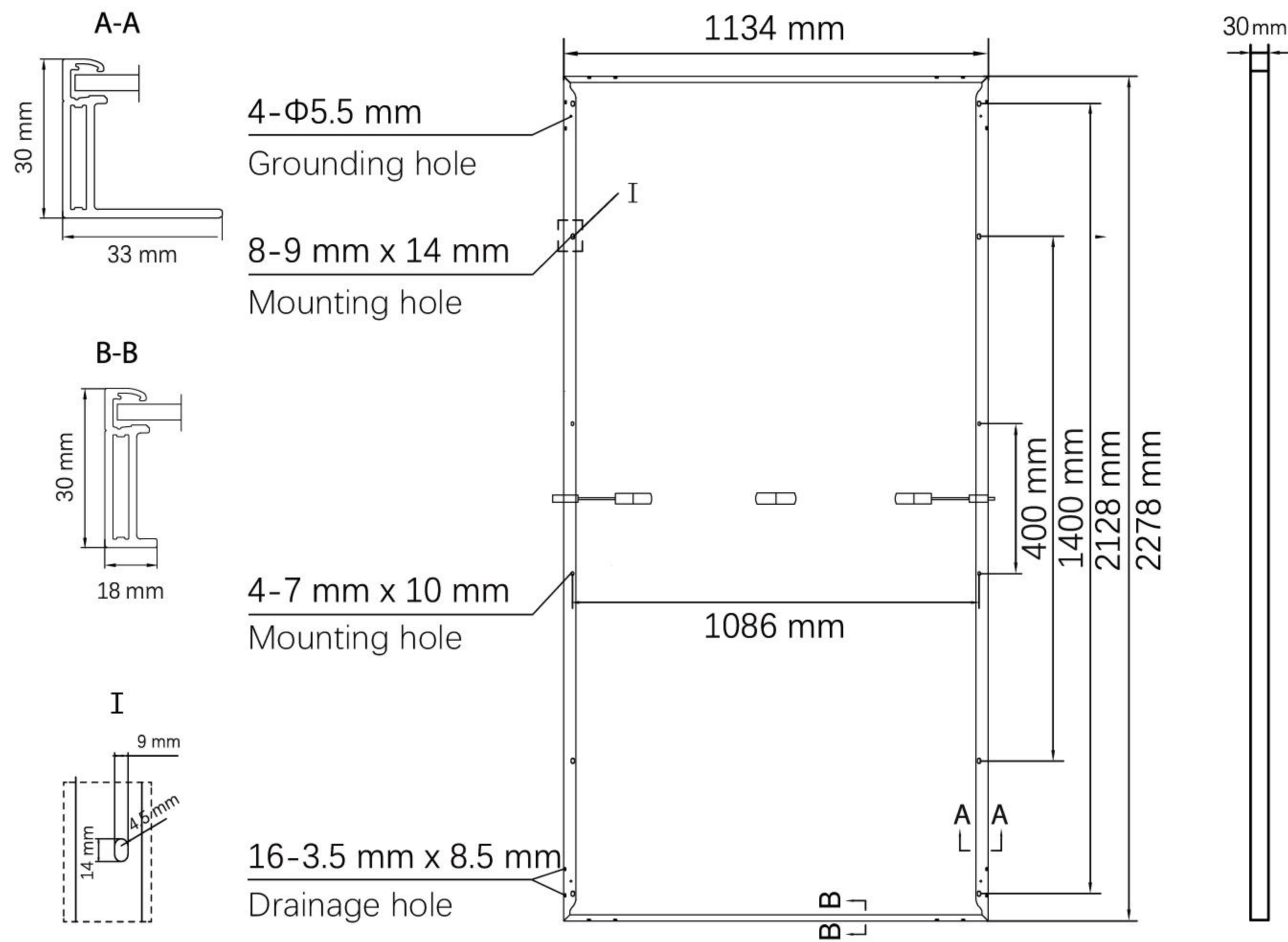
### Linear Warranty

First year attenuation  $\leq 2\%$ , 2-25 year annual attenuation  $\leq 0.55\%$



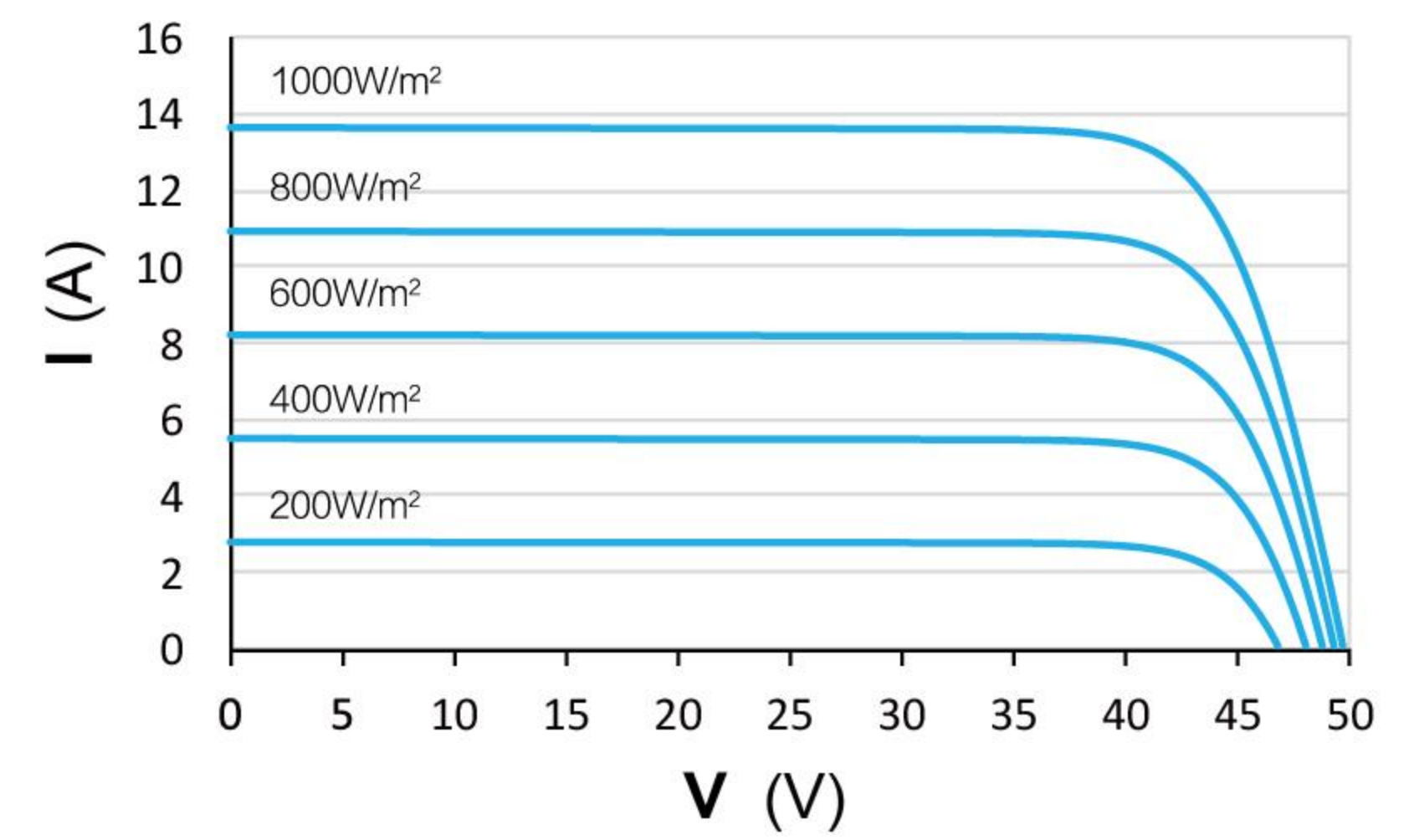
YC's Linear Performance Warranty Industry Standard Warranty



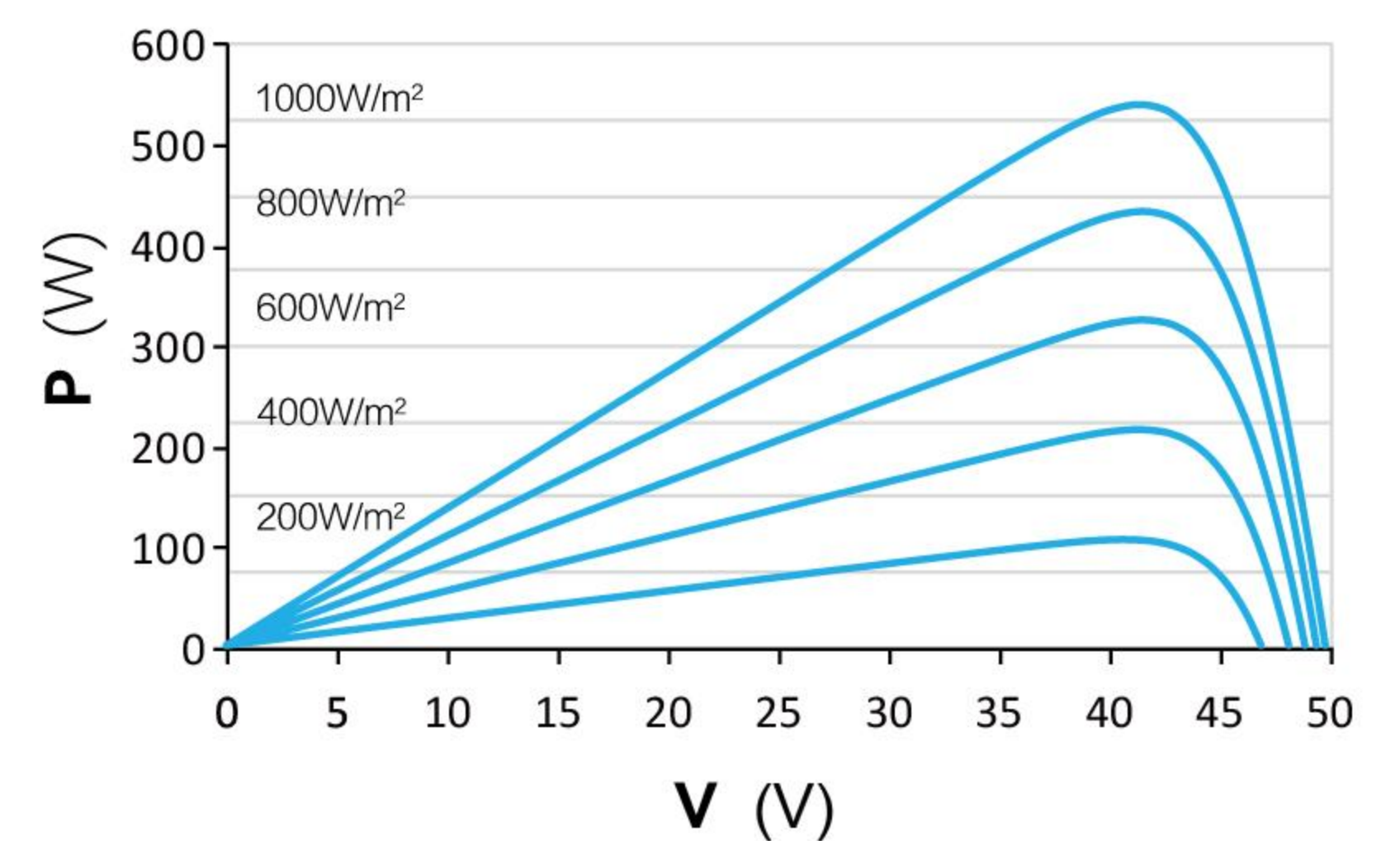


## Characteristic curve

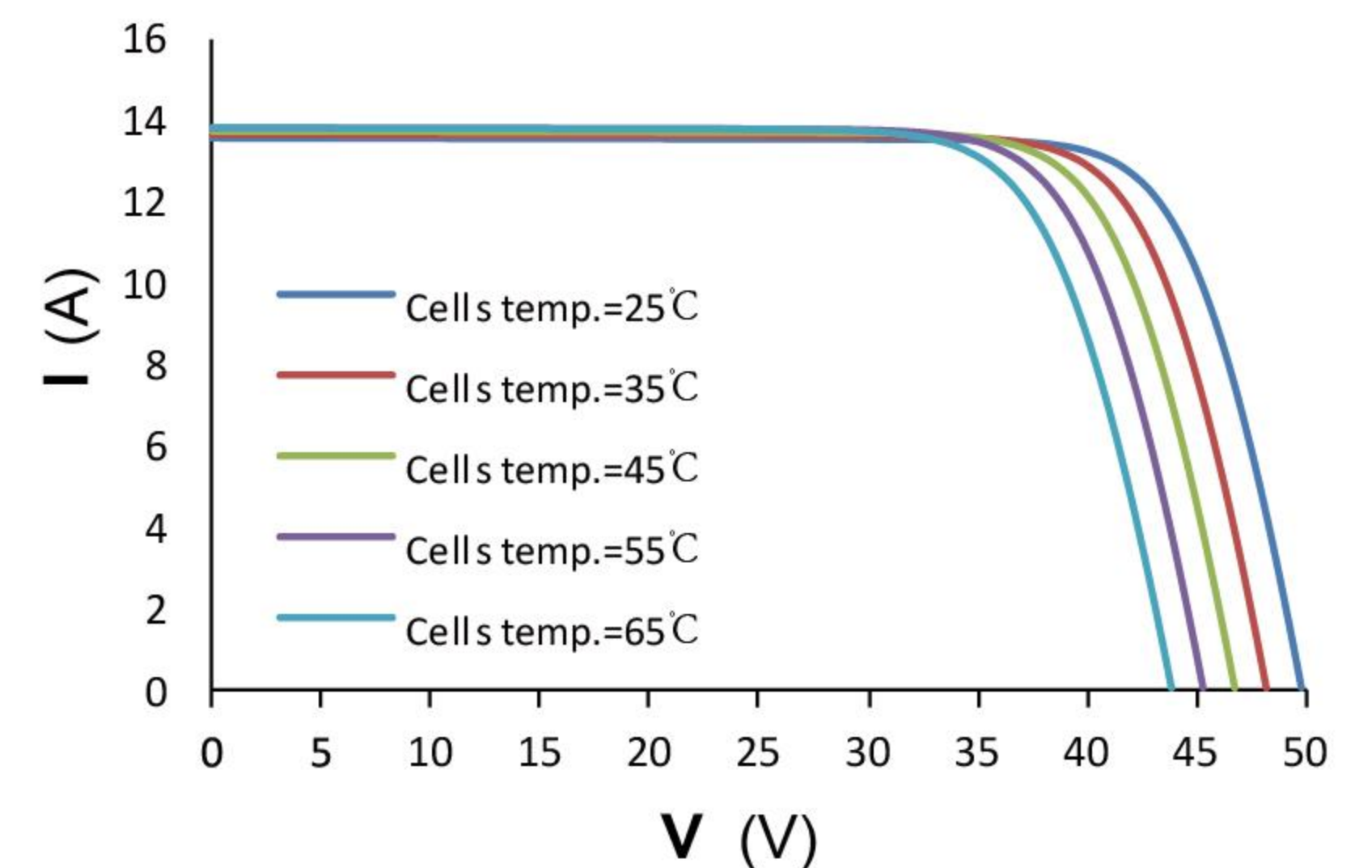
### I-V Curve



### P-V Curve



### I-V Curve



## ELECTRICAL PERFORMANCE

### Electrical parameters at Standard Test Conditions (STC)

Module type	YC xxx PSF 72 M10/2 (xxx=Pmax)					
	$P_{max}$	W	535	540	545	550
Power output	$P_{max}$	W	535	540	545	550
Power output tolerances	$\Delta P_{max}$	W	0/+5			
Module efficiency	$\eta_m$	%	20.70	20.90	21.10	21.30
Voltage at Pmax	$V_{mpp}$	V	41.60	41.76	41.93	42.10
Current at Pmax	$I_{mpp}$	A	12.86	12.93	13.00	13.06
Open-circuit voltage	$V_{oc}$	V	49.50	49.70	49.90	50.10
Short-circuit current	$I_{sc}$	A	13.61	13.72	13.81	13.90

STC: 1000W/m<sup>2</sup> irradiance, 25°C module temperature, AM1.5g spectrum according to EN 60904-3.  
Average relative efficiency reduction of 3.3% at 200W/m<sup>2</sup> according to EN 60904-1.  
Max test power tolerance  $\pm$  3%

### Electrical parameters at Nominal Operating Cell Temperature (NOCT)

Power output	YC xxx PSF 72 M10/2 (xxx=Pmax)					
	$P_{max}$	W	399.8	403.5	407.3	411.0
Power output	$P_{max}$	W	399.8	403.5	407.3	411.0
Voltage at Pmax	$V_{mpp}$	V	38.77	38.92	39.08	39.24
Current at Pmax	$I_{mpp}$	A	10.31	10.37	10.42	10.48
Open-circuit voltage	$V_{oc}$	V	46.78	46.97	47.16	47.34
Short-circuit current	$I_{sc}$	A	11.04	11.13	11.20	11.27

NOCT: open-circuit module operation temperature at 800W/m<sup>2</sup> irradiance, 20°C ambient temperature, 1m/s wind speed.

## OTHER INFORMATIONS

Cell Orientation	144 (24×6)
J-Box	IP68, three diodes
Cable	4mm <sup>2</sup> , positive 300mm/negative 300mm,length can be customized
Glass	3.2mm tempered glass
Frame	Anodized aluminum alloy
Weight	26.6kg
Dimensions	2278×1134×30mm
Packaging	36 modules per pallet/20 pallets per 40HQ

## THERMAL CHARACTERISTICS

Temperature coefficient of Pmax	$\gamma$	%/°C	-0.350
Temperature coefficient of Voc	$\beta_{Voc}$	%/°C	-0.270
Temperature coefficient of Isc	$\alpha_{Isc}$	%/°C	+0.045

## OPERATING CONDITIONS

Operating temperature range	-40°C to 85°C
Power tolerance	0 ~ +5W
Voc & Isc tolerance	$\pm$ 3%
Max. system voltage	1500V <sub>DC</sub>
Max. series fuse rating	25A
Nominal operating cell temperature	45 $\pm$ 2°C
Protection Class	Class II

DO NOT connect Fuse in Combiner Box with two or more strings in parallel connection

## MECHANICAL LOADING

Max. static load, front (e.g., snow)	5400Pa
Max. static load, back (e.g., wind)	2400Pa
Max. hailstone impact (diameter / velocity)	25mm/23m/s

Warning: Read the Installation and User Manual in its entirety before handling, installing and operating YC Solar modules.