

YCxXXPDF 54 M10/2

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



21.55%

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



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.



Bifacial Power

Bifacial panel, High generation revenue



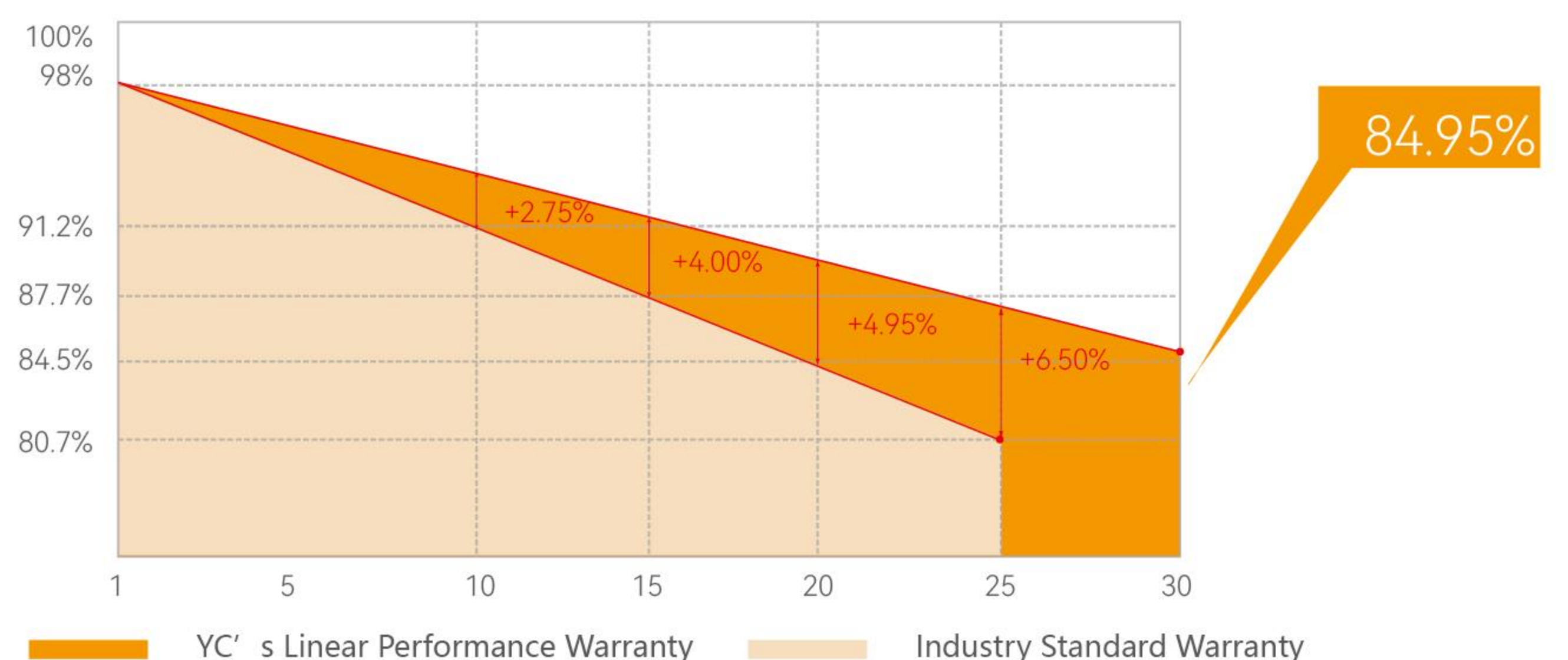
Large size cell

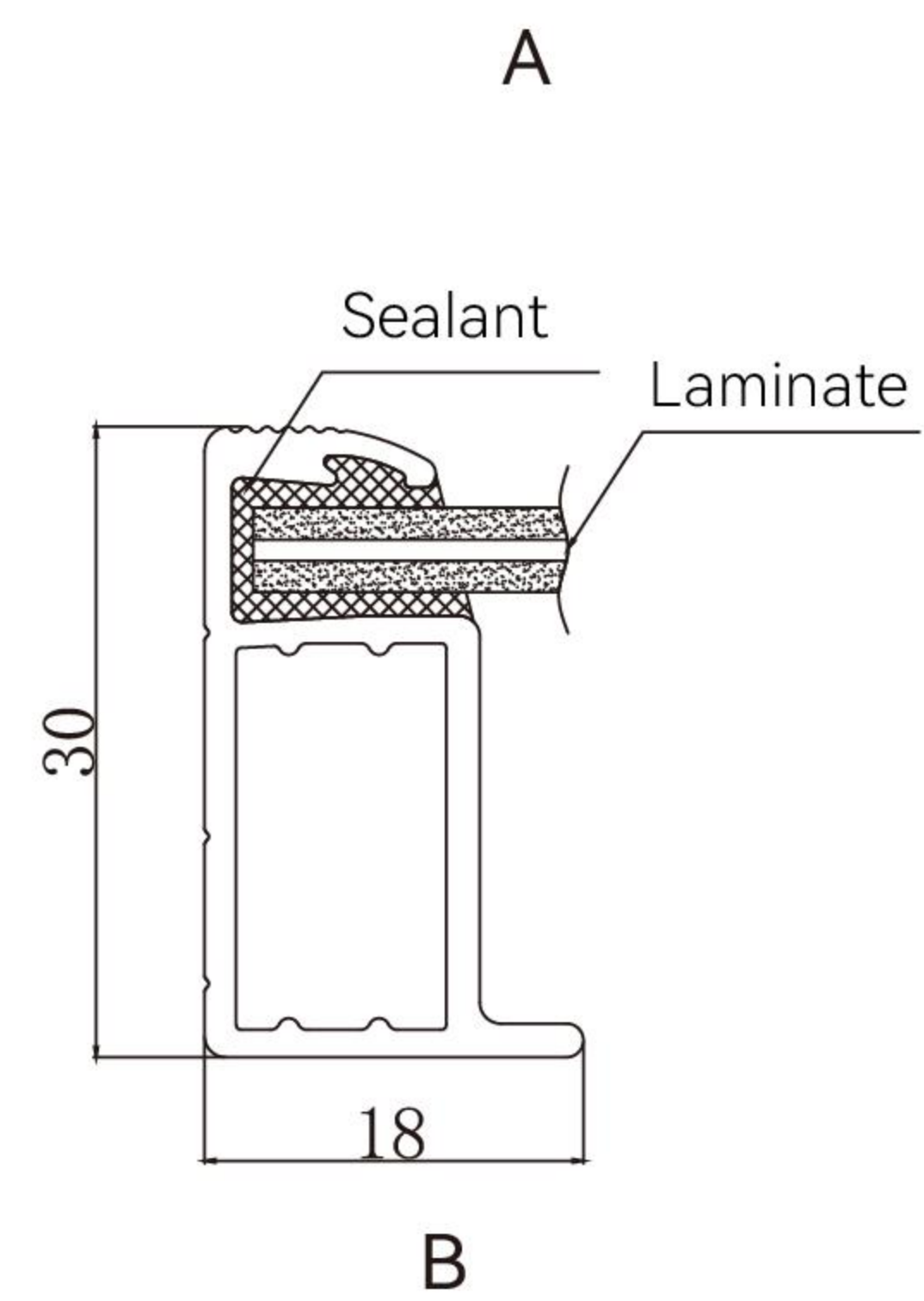
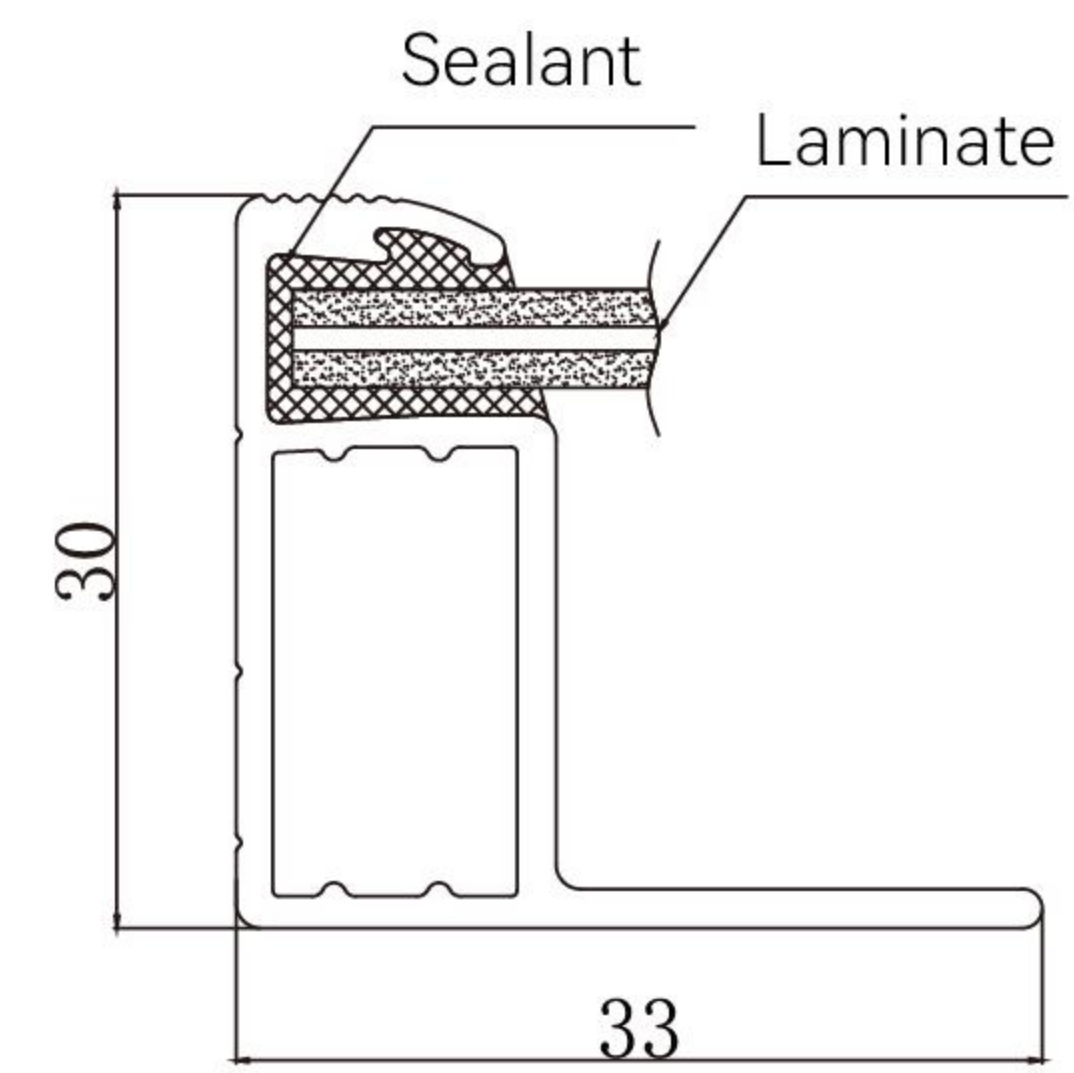
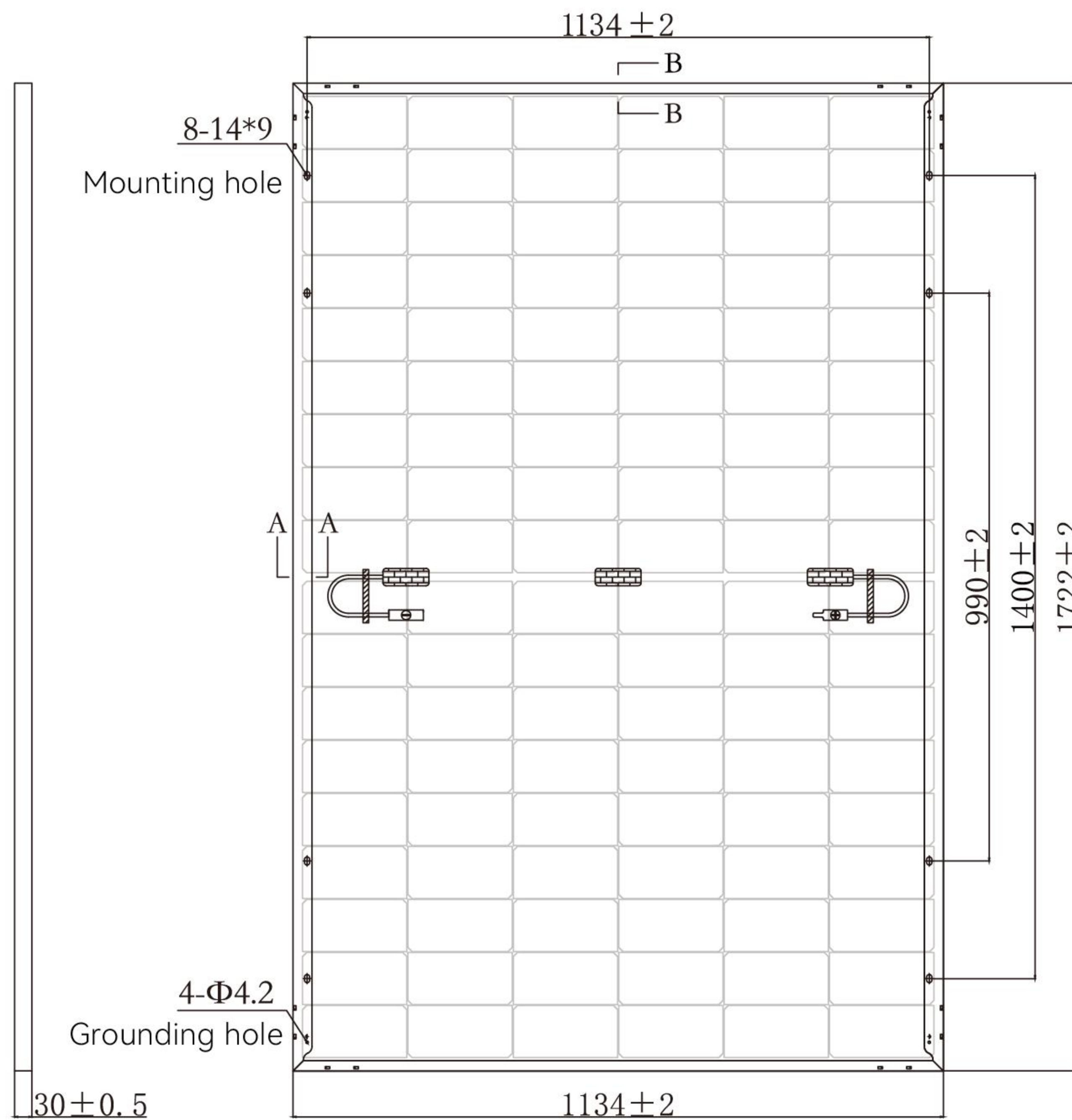
The large cell design effectively increases module peak power and effectively reduces BOS costs, thereby reducing system costs.

Linear Warranty

First year attenuation $\leq 2\%$, 2-30 year annual attenuation $\leq 0.45\%$

Linear Performance Warranty of YC Solar





ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

Module type	YCxxxPDF54M10/2 (xxx=Pmax)						
	P_{max}	W	400	405	410	415	420
Power output	P_{max}	W	400	405	410	415	420
Power output tolerances	ΔP_{max}	W	0/+5				
Module efficiency	η_m	%	20.50	20.80	21.00	21.30	21.55
Voltage at Pmax	V_{mpp}	V	30.65	30.80	30.95	31.10	31.25
Current at Pmax	I_{mpp}	A	13.06	13.15	13.25	13.35	13.45
Open-circuit voltage	V_{oc}	V	37.06	37.17	37.28	37.39	37.50
Short-circuit current	I_{sc}	A	13.78	13.86	13.94	14.02	14.10

STC: 1000W/m² irradiance, 25°C module temperature, AM1.5g spectrum according to EN 60904-3.
Average relative efficiency reduction of 3.3% at 200W/m² according to EN 60904-1.
Max test power tolerance $\pm 3\%$

Electrical parameters at Nominal Operating Cell Temperature (NOCT)

Module type	YCxxxPDF54M10/2 (xxx=Pmax)						
	P_{max}	W	297.6	301.3	305.0	308.8	312.5
Power output	P_{max}	W	297.6	301.3	305.0	308.8	312.5
Voltage at Pmax	V_{mpp}	V	28.50	28.60	28.80	28.90	29.05
Current at Pmax	I_{mpp}	A	10.45	10.52	10.60	10.68	10.76
Open-circuit voltage	V_{oc}	V	34.70	34.80	34.90	35.00	35.10
Short-circuit current	I_{sc}	A	11.13	11.20	11.26	11.33	11.40

NOCT: open-circuit module operation temperature at 800W/m² irradiance, 20°C ambient temperature, 1m/s wind speed.

THERMAL CHARACTERISTICS

Temperature coefficient of Pmax	γ	%/°C	-0.350
Temperature coefficient of Voc	β_{Voc}	%/°C	-0.270
Temperature coefficient of Isc	α_{Isc}	%/°C	+0.045

OTHER INFORMATIONS

Cell Orientation	108 (18×6)
J-Box	IP68, three diodes
Cable	4mm ² , positive 500mm/negative 500mm,length can be customized
Glass	Dual Glass,2.0mm coated tempered glass
Frame	Anodized aluminum alloy
Weight	24.1kg
Dimensions	1722×1134×30mm
Packaging	36 modules per pallet/26 pallets per 40HQ

OPERATING CONDITIONS

Operating temperature range	-40°C to 85°C
Power tolerance	0 ~ +5W
Voc & Isc tolerance	$\pm 3\%$
Max. system voltage	1500V _{DC}
Max. series fuse rating	30A
Nominal operating cell temperature	45±2°C
Protection Class	Class II
Bifacial Rate	70±5%

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