

YCxxxNDF 54 M10/2

The best quality N-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.



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.

22.5%

Module Efficiency

15YEAR

Product Warranty

0~+5W

Power tolerance

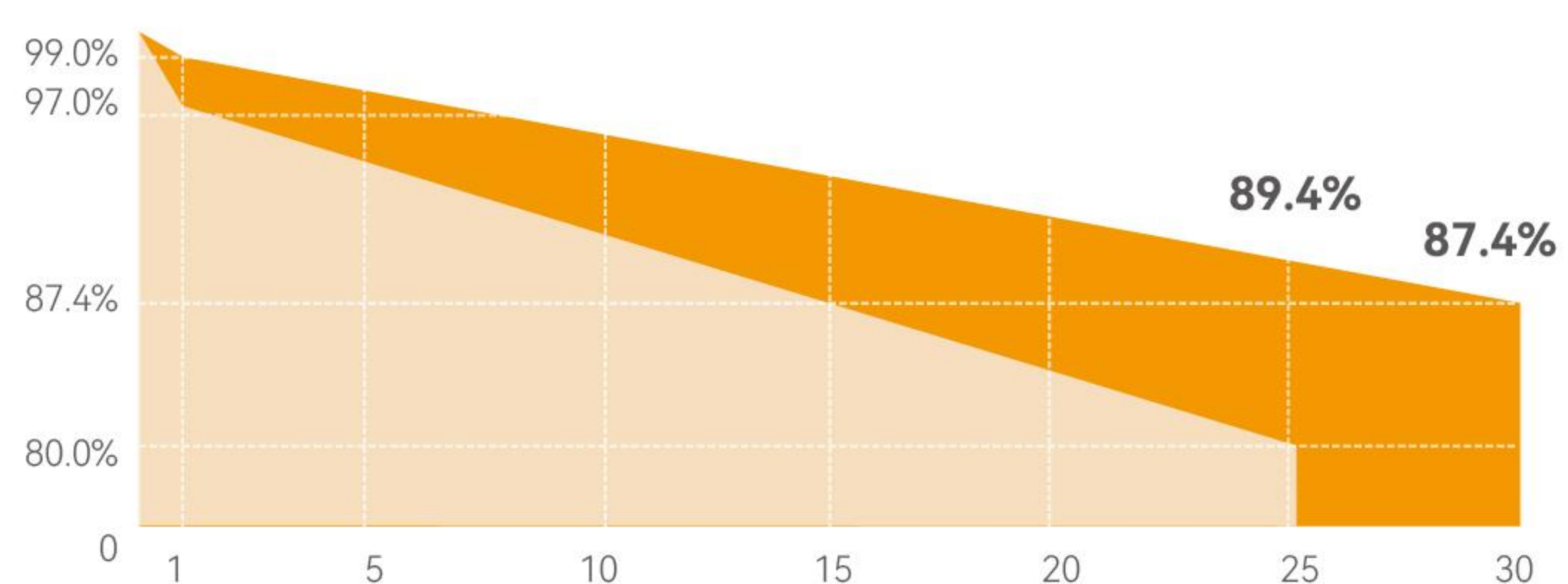
QUALIFICATIONS & CERTIFICATES

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

Linear Warranty

First year attenuation $\leq 1\%$, 2-30 year anual attenuation $\leq 0.4\%$

Linear Performance Warranty of YC Solar



YC's Linear Performance Warranty

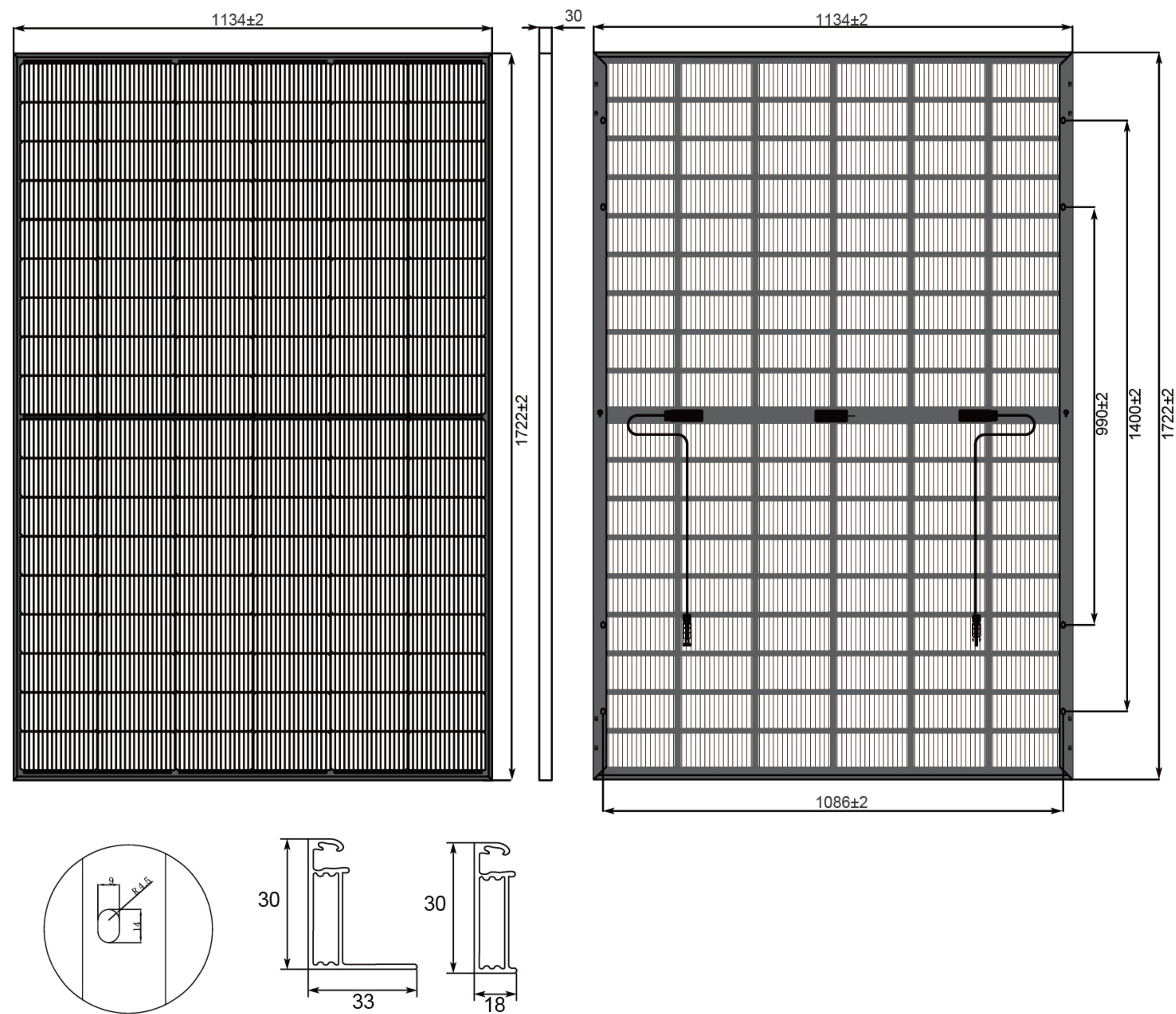


Industry Standard Warranty

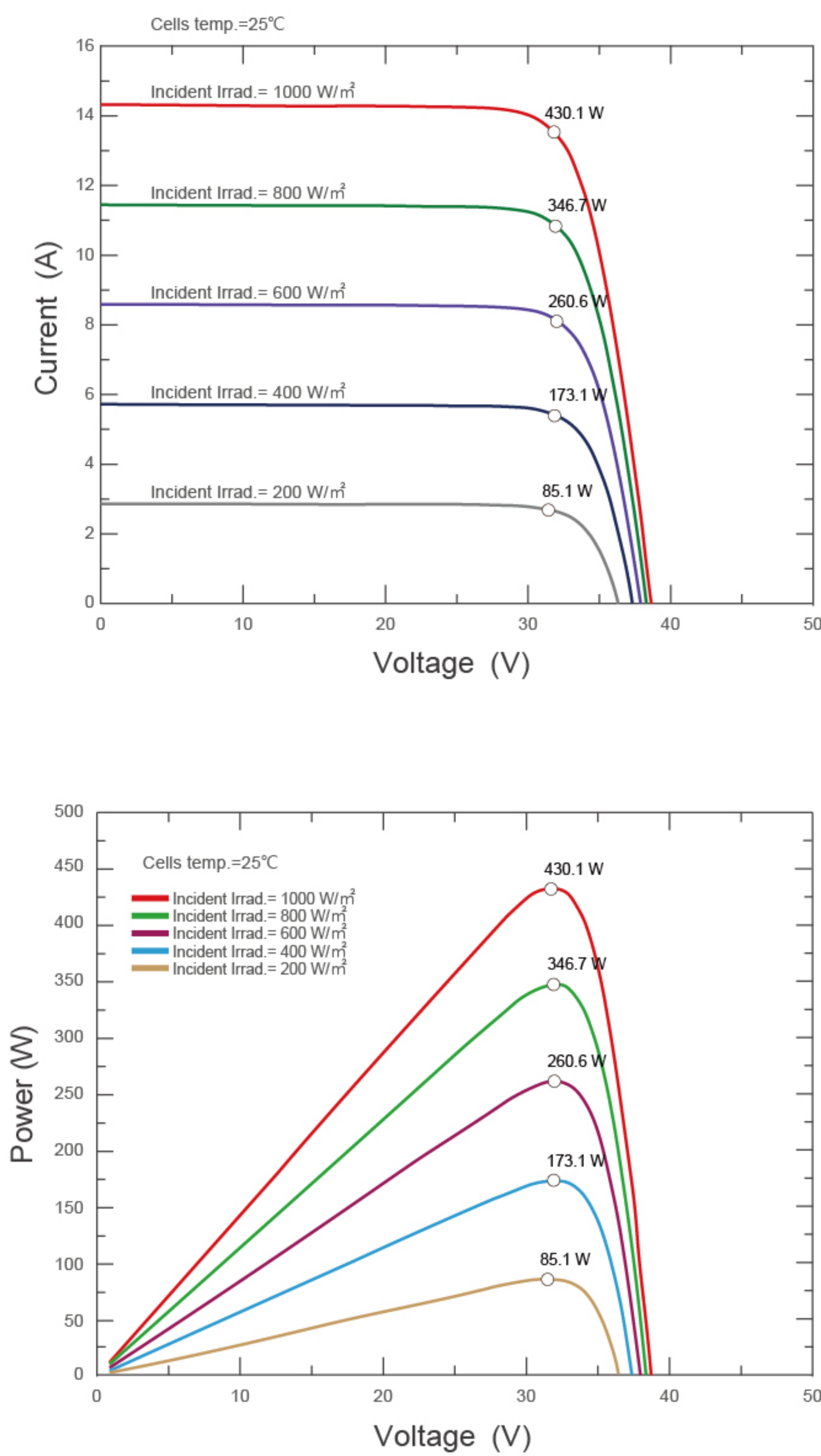
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Unit:mm



Characteristic curve



ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)							
Module type	YCxxxNDF54M10/2 (xxx=Pmax)						
Power output	P _{max}	W	415	420	425	430	435
Power output tolerances	ΔP _{max}	W	0/+5				
Module efficiency	η _m	%	21.50	21.70	22.10	22.30	22.50
Voltage at Pmax	V _{mpp}	V	31.33	31.47	31.76	31.90	32.04
Current at Pmax	I _{mpp}	A	13.29	13.35	13.47	13.53	13.59
Open-circuit voltage	V _{oc}	V	37.85	38.00	38.30	38.45	38.60
Short-circuit current	I _{sc}	A	14.07	14.13	14.25	14.31	14.37

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 ± 3%

Electrical parameters at Nominal Operating Cell Temperature (NOCT)							
Power output	P _{max}	W	310.7	313.6	319.3	322.1	325.0
Voltage at Pmax	V _{mpp}	V	29.55	29.70	30.00	30.12	30.26
Current at Pmax	I _{mpp}	A	10.50	10.55	10.65	10.70	10.74
Open-circuit voltage	V _{oc}	V	35.70	35.85	36.15	36.30	36.45
Short-circuit current	I _{sc}	A	11.34	11.39	11.49	11.54	11.59

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	-0.300
Temperature coefficient of Voc	β _{Voc}	%/°C	-0.250
Temperature coefficient of Isc	α _{Isc}	%/°C	+0.045

OTHER INFORMATIONS

Cell Orientation	108 (18×6)
J-Box	IP68, three diodes
Cable	4mm², positive 300mm/negative 300mm,length can be customized
Glass	Dual Glass,1.6mm coated tempered glass
Frame	Anodized aluminum alloy
Weight	21kg
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	±3%
Max. system voltage	1500V _{DC}
Max. series fuse rating	30A
Nominal operating cell temperature	45±2°C
Protection Class	Class II
Bifacial Rate	80±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

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

Yingchen New Energy Technology Co., LTD.