

YC xxx PSF 55 G12/2

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.

21.2%

Module Efficiency

12YEAR

Product Warranty

0~+5W

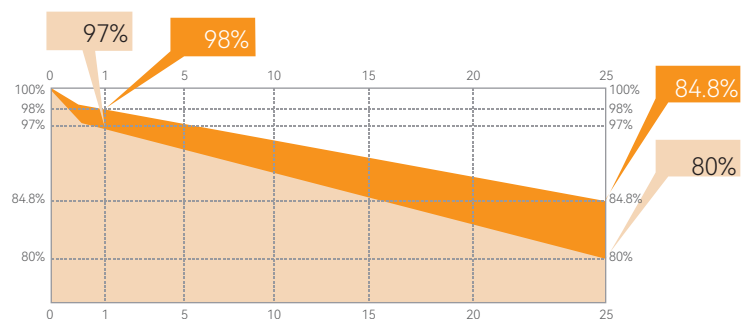
Power tolerance

QUALIFICATIONS & CERTIFICATES

IEC 61215, IEC 61730, CE, ISO 9001:2015,
ISO 14001:2015, ISO450012018

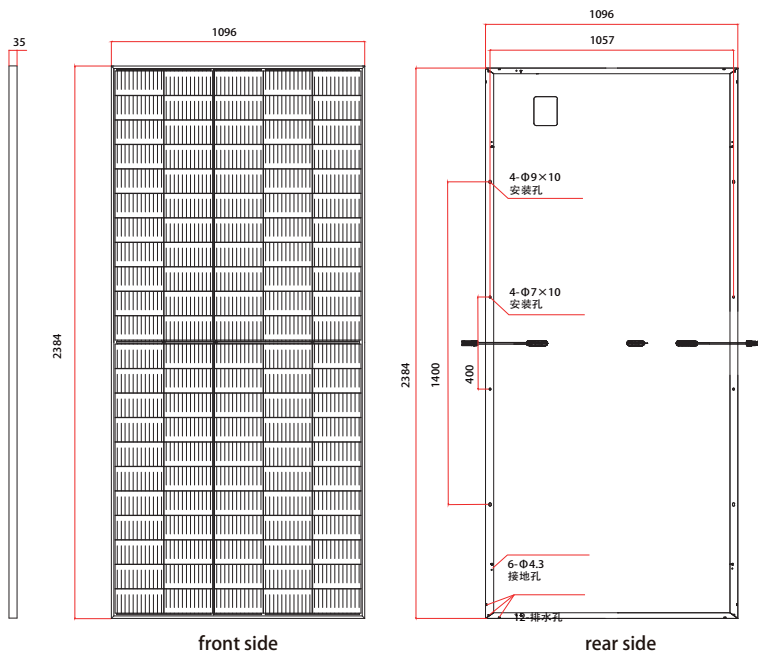
Linear Warranty

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



YC's Linear Performance Warranty Industry Standard Warranty

YC xxx PSF 55 G12/2



ELECTRICAL PERFORMANCE

Electrical parameters at Standard Test Conditions (STC)

Module type	YC xxx PSF 55 G12/2 (xxx=Pmax) YC xxx PSF 55 G12/2-1500V (xxx=Pmax)							
	P_{max}	W	530	535	540	545	550	555
Power output	P_{max}	W	530	535	540	545	550	555
Power output tolerances	ΔP_{max}	W	0/+5					
Module efficiency	η_m	%	20.30	20.50	20.70	20.90	21.00	21.20
Voltage at Pmax	V_{mpp}	V	30.80	31.00	31.20	31.40	31.60	31.80
Current at Pmax	I_{mpp}	A	17.21	17.28	17.33	17.37	17.40	17.45
Open-circuit voltage	V_{oc}	V	37.10	37.30	37.50	37.70	37.90	38.10
Short-circuit current	I_{sc}	A	18.31	18.36	18.41	18.47	18.52	18.56

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)

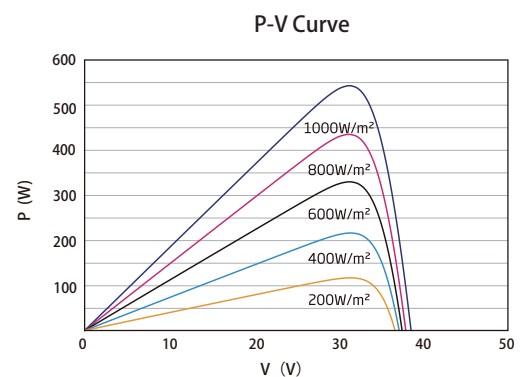
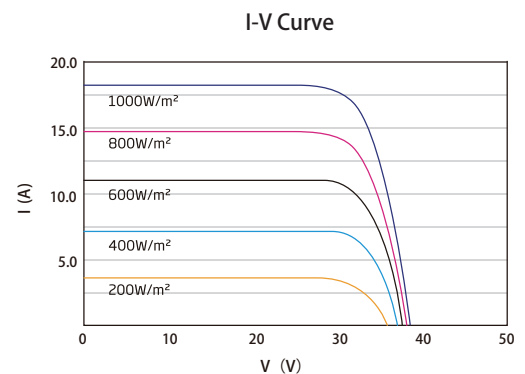
Power output	YC xxx PSF 55 G12/2 (xxx=Pmax) YC xxx PSF 55 G12/2-1500V (xxx=Pmax)							
	P_{max}	W	401	405	409	413	417	420
Voltage at Pmax	V_{mpp}	V	28.60	28.80	29.00	29.20	29.30	29.50
Current at Pmax	I_{mpp}	A	14.01	14.06	14.10	14.15	14.19	14.23
Open-circuit voltage	V_{oc}	V	35.00	35.10	35.30	35.50	35.70	35.90
Short-circuit current	I_{sc}	A	14.76	14.80	14.84	14.88	14.92	14.96

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

OTHER INFORMATIONS

Cell Orientation	110 (22×5)
J-Box	IP68, three diodes
Cable	4mm ² , positive 400mm/negative 200mm,length can be customized
Glass	3.2mm tempered glass
Frame	Anodized aluminum alloy
Weight	28.6kg
Dimensions	2384×1096×35mm
Packaging	31 modules per pallet/20 pallets per 40' container

Characteristic curve



THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	45± 2
Temperature coefficient of Pmax	γ	%/°C	-0.350
Temperature coefficient of Voc	β_{Voc}	%/°C	-0.284
Temperature coefficient of Isc	α_{Isc}	%/°C	+0.050

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

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.