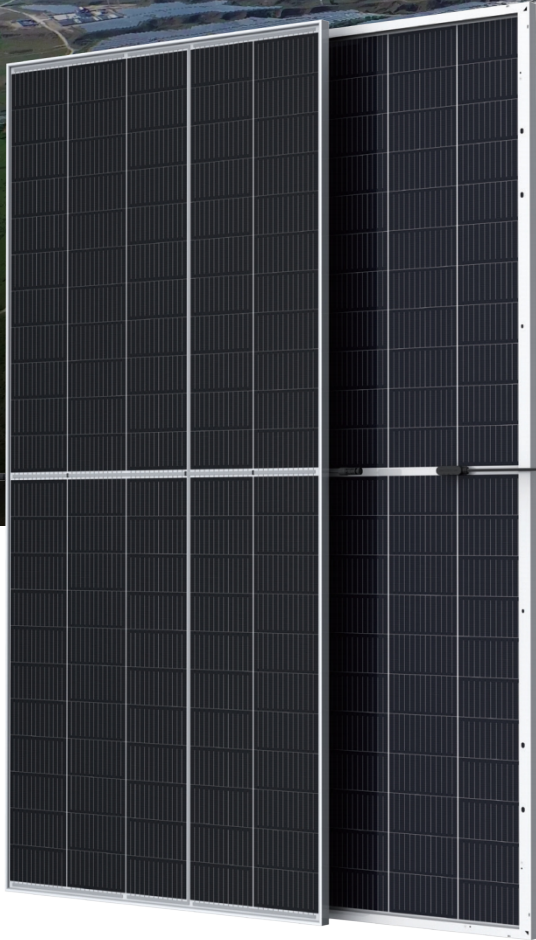


## YC xxx PDF 55 G12/2

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



### 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



#### 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



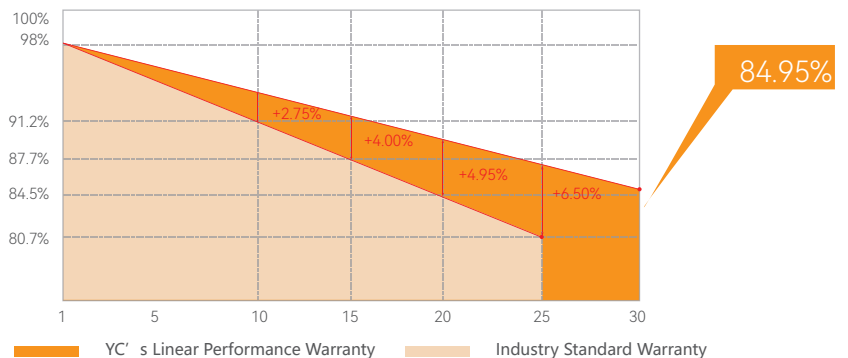
#### Large size cell

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

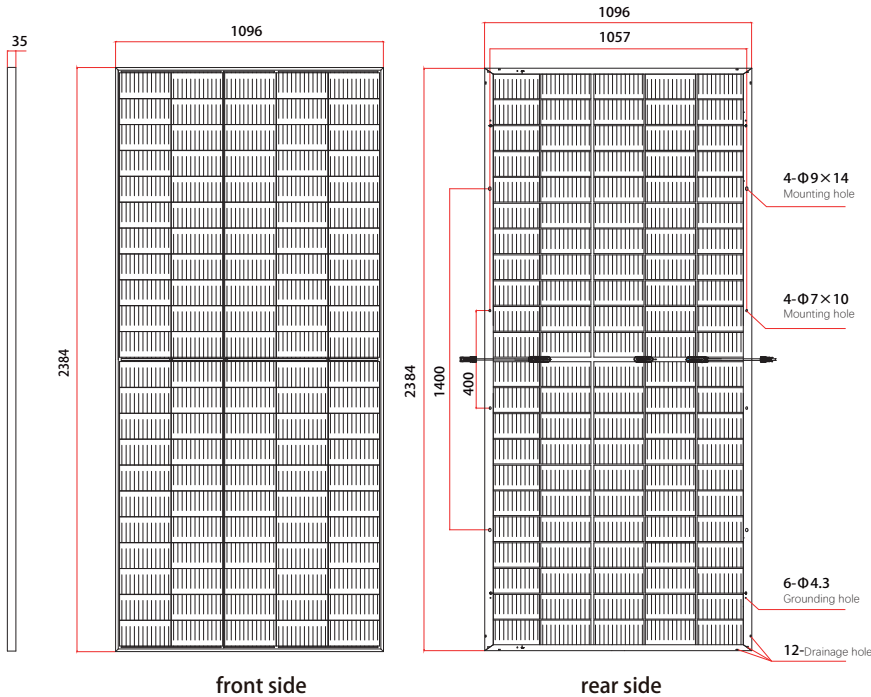
#### Linear Warranty

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

Linear Performance Warranty of YC Solar



# YC xxx PDF 55 G12/2



## ELECTRICAL PERFORMANCE

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

Module type	YC xxx PDF 55 G12/2 (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	$\Delta P_{max}$	W	0/+5					
Module efficiency	$\eta_m$	%	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/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 ± 3%

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

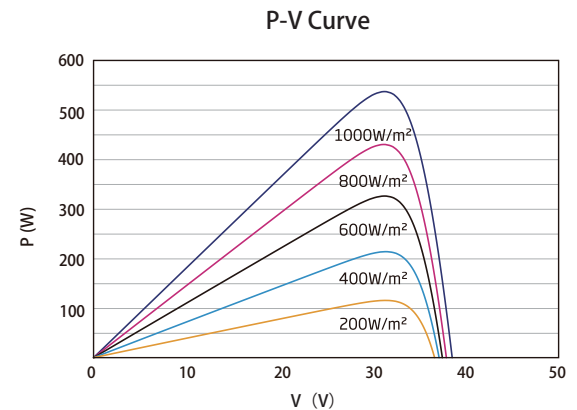
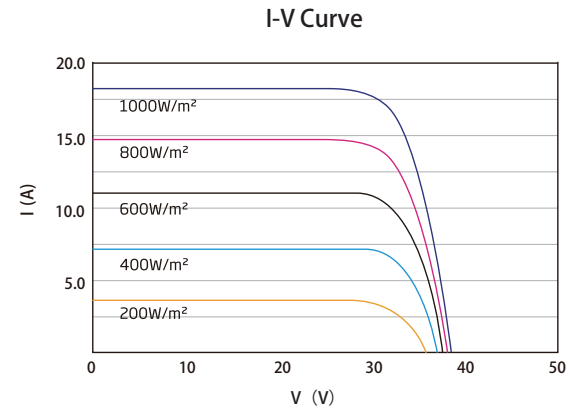
Power output	YC xxx PDF 55 G12/2 (xxx=Pmax)							
	$P_{max}$	W	401	405	409	413	417	420
Voltage at Pmax	$V_{mpp}$	V	28.60	28.80	29.00	29.20	29.30	29.50
Current at Pmax	$I_{mpp}$	A	14.01	14.06	14.10	14.15	14.19	14.23
Open-circuit voltage	$V_{oc}$	V	35.00	35.10	35.30	35.50	35.70	35.90
Short-circuit current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

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

## OTHER INFORMATIONS

Cell Orientation	110 (22×5)
J-Box	IP68, three diodes
Cable	4mm <sup>2</sup> , positive 400mm/negative 200mm,length can be customized
Glass	Dual Glass,2.0mm coated tempered glass
Frame	Anodized aluminum alloy
Weight	32.4kg
Dimensions	2384×1096×30mm
Packaging	36 modules per pallet/20 pallets per 40' container

## Characteristic curve



## THERMAL CHARACTERISTICS

Temperature coefficient of Pmax	$\gamma$	%/°C	-0.350
Temperature coefficient of Voc	$\beta_{Voc}$	%/°C	-0.284
Temperature coefficient of Isc	$\alpha_{Isc}$	%/°C	+0.050

## OPERATING CONDITIONS

Operating temperature range	-40°C to 85°C
Power tolerance	0 ~ +5W
Voc & Isc tolerance	±3%
Max. system voltage	1500V <sub>DC</sub>
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



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