# YC SOLAR YC xxx PDF 66 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 microcracks and fingers broken. High Power Density High conversion efficiency and more power output per square meter, by lower series resistance and improved light harvesting.

21.6%

Module Efficiency

## 12YEAR

**Product Warranty** 

 $0 \sim +5 \text{W}$ 

Power tolerance

## **QUALIFICATIONS & CERTIFICATES**

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



## Half-cell Design

Less energy loss cased 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



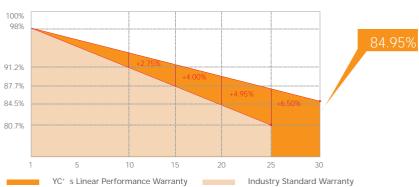
## Large size cell

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

## Linear Warranty

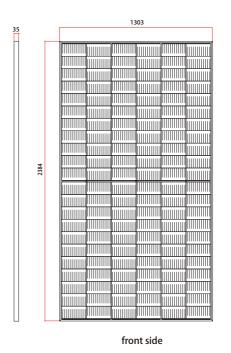
First year attenuation≦2%, 2-30 year anual attenuation≦0.45%

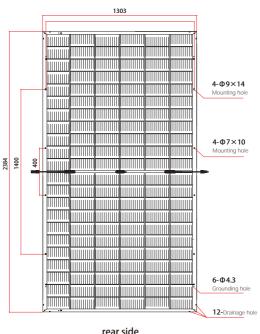
## Linear Performance Warranty of YC Solar



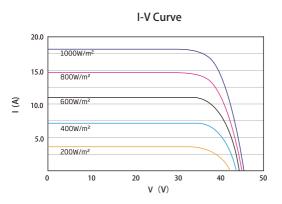
YC SOLAR

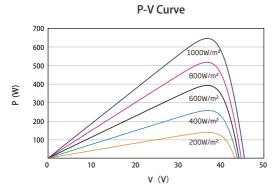
## YC xxx PDF 66 G12/2





## Characteristic curve





## **ELECTRICAL PERFORMANCE**

Electrical parameters at Standard Test Conditions (STC)

Module type	YC xxx PDF 66 G12/2 (xxx=Pmax)								
Power output	P <sub>max</sub>	W	635	640	645	650	655	660	
Power output tolerances	$\Delta P_{\text{max}}$	W	0/+5						
Module efficiency	η <sub>m</sub>	%	20.40	20.60	20.80	20.90	21.10	21.20	:

Power output	P <sub>max</sub>	W	635	640	645	650	655	660	665	670
Power output tolerances	$\Delta P_{\text{max}}$	W		0/+5						
Module efficiency	$\eta_{\scriptscriptstyle m}$	%	20.40	20.60	20.80	20.90	21.10	21.20	21.40	21.60
Voltage at Pmax	$V_{mpp}$	V	37.10	37.30	37.50	37.70	37.90	38.10	38.30	38.50
Current at Pmax	I <sub>mpp</sub>	Α	17.15	17.19	17.23	17.27	17.31	17.35	17.43	17.43
Open-circuit voltage	V <sub>oc</sub>	٧	44.90	45.10	45.30	45.50	45.70	45.90	46.10	46.30
Short-circuit current	I <sub>sc</sub>	Α	18.21	18.26	18.31	18.35	18.40	18.45	18.50	18.54

STC: 1000W/m2 irradiance,  $25^{\circ}C$  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 <sub>max</sub>	W	635	640	645	650	655	660	665	670
Voltage at Pmax	$V_{mpp}$	٧	34.60	34.70	34.90	35.10	35.20	35.40	35.60	35.70
Current at Pmax	I <sub>mpp</sub>	А	13.90	13.94	13.98	14.01	14.05	14.10	14.30	14.17
Open-circuit voltage	V <sub>oc</sub>	٧	42.30	42.50	42.70	42.90	43.00	43.20	43.40	43.60
Short-circuit current	I <sub>sc</sub>	Α	14.67	14.71	14.75	14.79	14.83	14.87	14.91	14.95

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

### OTHER INFORMATIONS

Cell Orientation	132 (22×6)
J-Box	IP68, three diodes
Cable	4mm², positive 400mm/negative 200mm,length can be customized
Glass	Dual Glass,2.0mm coated tempered glass
Frame	Anodized aluminum alloy
Weight	38.7kg
Dimensions	2384×1303×35mm
Packaging	31 modules per pallet/18 pallets per 40' container

#### THERMAL CHARACTERISTICS °C Nominal operating cell temperature NOCT 45± 2 Temperature coefficient of Pmax %/°C -0.350 Temperature coefficient of Voc %/°C -0.284 $\beta_{\text{Voc}}$

%/°C

 $\alpha_{lsc}$ 

+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	35A					
Nominal operating cell temperature	45±2℃					
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

Temperature coefficient of Isc

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