



**pan<sub>η</sub>da 3.0 Plus 1**

**720W**

MAXIMUM MODULE EFFICIENCY

**23.2%**

POSITIVE POWER TOLERANCE

**0~+5<sub>w</sub>**



N-type TOPCon Bifacial Module

# IMPROVED POWER NEVER SETTLE FOR LESS

- Backside Yield
- Wide Applications
- Superior Yield
- Outstanding Bifaciality
- Excellent Durability



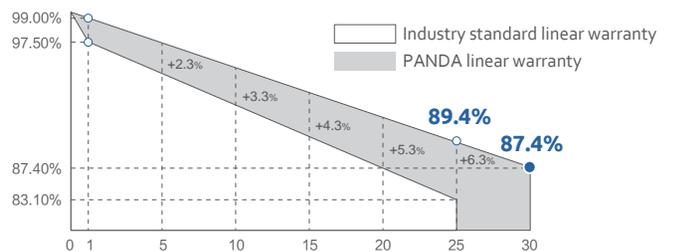
Yingli Solar Website

## QUALIFICATIONS & CERTIFICATES

- IEC 61215, IEC 61730, CE
- ISO 9001: Quality management systems
- ISO 14001: Environmental management systems
- IEC 62941: Quality system for PV module manufacturing
- ISO 45001: Occupational health and safety management systems



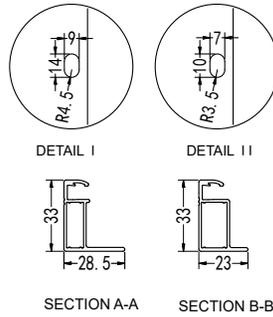
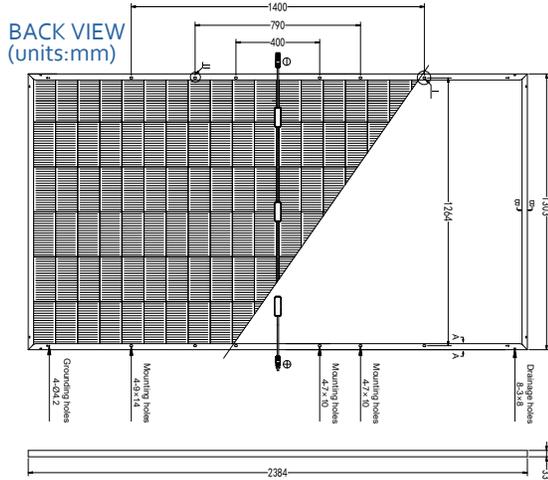
Warranty partner



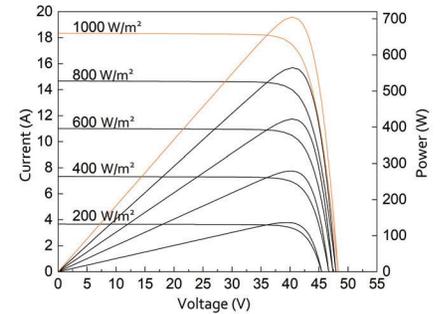
**1.00%** the 1st year power degradation  
**0.40%** annual power degradation



Densys pv5 | We deliver. You install. The sun does all the rest. | Data sheet provided for you @ [www.densys-pv5.de](http://www.densys-pv5.de)



I-V / P-V CURVES



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

## Electrical Parameters at Standard Test Conditions (STC)

Module type	YLxxxCF66 f/2 (xxx=Pmax)					
Power output*·Pmax (W)	695	700	705	710	715	720
Power output tolerances-ΔPmax (W)	0 / + 5					
Module efficiency-η <sub>m</sub> (%)	22.4	22.5	22.7	22.9	23.0	23.2
Voltage at Pmax - V <sub>mpp</sub> (V)	40.40	40.55	40.70	40.85	41.00	41.15
Current at Pmax-I <sub>mp</sub> (A)	17.21	17.27	17.33	17.39	17.44	17.50
Open-circuit voltage*·V <sub>oc</sub> (V)	47.90	48.10	48.30	48.50	48.70	48.90
Short-circuit current*·I <sub>sc</sub> (A)	18.26	18.30	18.34	18.38	18.42	18.46

STC: 1000 W·m<sup>-2</sup> irradiance, 25°C cell temperature, AM 1.5. \*Measruing tolerance: ±3%.

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

Power output·Pmax (W)	529	533	536	540	544	548
Voltage at Pmax - V <sub>mpp</sub> (V)	38.54	38.68	38.83	38.97	39.11	39.25
Current at Pmax-I <sub>mp</sub> (A)	13.72	13.77	13.82	13.86	13.90	13.95
Open-circuit voltage·V <sub>oc</sub> (V)	45.49	45.68	45.87	46.06	46.25	46.44
Short-circuit current·I <sub>sc</sub> (A)	14.71	14.74	14.78	14.81	14.84	14.87

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

## Bifacial Electrical Parameters at Standard Test Conditions(BNPI)

Power output·Pmax (W)	770	776	782	787	792	798
Voltage at Pmax - V <sub>mpp</sub> (V)	40.40	40.55	40.70	40.85	41.00	41.15
Current at Pmax-I <sub>mp</sub> (A)	19.07	19.14	19.20	19.27	19.32	19.39
Open-circuit voltage·V <sub>oc</sub> (V)	47.90	48.10	48.30	48.50	48.70	48.90
Short-circuit current·I <sub>sc</sub> (A)	20.23	20.28	20.32	20.37	20.41	20.45

BNPI: 1000W·m<sup>-2</sup> on the front side and 135 W·m<sup>-2</sup> on the back side , 25°C cell temperature, AM 1.5. Bifaciality coefficient is 80% ± 5%.

## Thermal Characteristics

Nominal operating cell temperature-NOCT(°C)	42 ± 2
Temperature coefficient of Pmax-γ (% / °C)	- 0.29
Temperature coefficient of V <sub>oc</sub> -β (% / °C)	- 0.24
Temperature coefficient of I <sub>sc</sub> -α (% / °C)	0.042

## Packaging Specifications

Number of modules per pallet	33
Number of pallets per 40' container	17
Packaging box dimensions (L / W / H)	1340 mm / 1140 mm / 2500 mm
Box weight	1284 kg

## Operating Conditions

Max. system voltage	1500 V <sub>dc</sub>
Max. series fuse rating*	35 A
Operating temperature range	- 40°C~ 85°C
Max. static load, front (e.g., snow)	5400 Pa
Max. static load, back (e.g., wind)	2400 Pa
Max. hailstone impact (diameter / velocity)	25 mm / 23 m·s <sup>-1</sup>

\*Do not connect fuse in combiner box with two or more strings in parallel connection.

## General Characteristics

Dimensions (L / W / H)	2384 mm / 1303 mm / 33 mm
Weight	37.3 kg

## Construction Materials

Cell (material / quantity)	n-type monocrystalline silicon / 6 x 22
Glass (thickness)	2.0 mm / 2.0 mm
Frame (material)	anodized aluminum alloy
Junction box (type / protection degree)	3 bypass diodes / ≥ IP68
Cable (length / cross-sectional area)	± 300 mm or customized length / 4 mm <sup>2</sup>

•Due to continuous innovation, research and product improvement, the specifications in this product information sheet are subject to change without prior notice.

The specifications may deviate slightly and are not guaranteed.

•The data do not refer to a single module and they are not part of the offer, they only serve for comparison to different module types.



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