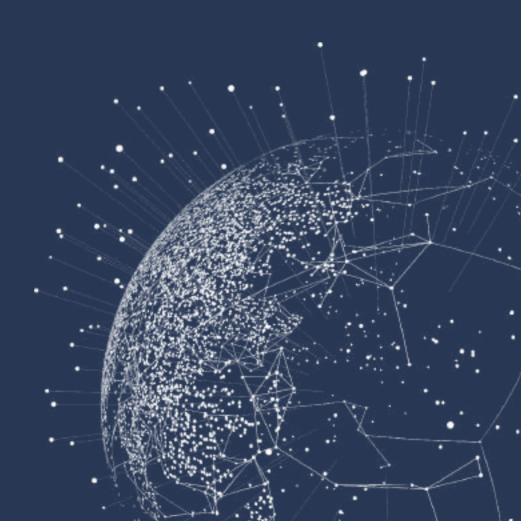


## BYD SOLAR »

Build Your Dreams











## BYD's Dream All Human Hope

Changing human dependence on non-renewable energy as the starting point, with three green dreams of electric vehicle, energy storage station and solar farm, BYD looks forward to helping more countries and people to get rid of fossil energy over consumption crisis and environmental pollution, and strive to leave offspring a beautiful and clean world to live in.



In the daytime, solar panels capture solar energy like plants. At night, energy storage station transports the stored energy, like solar energy, wind energy, tidal energy, to thousands of families smoothly.

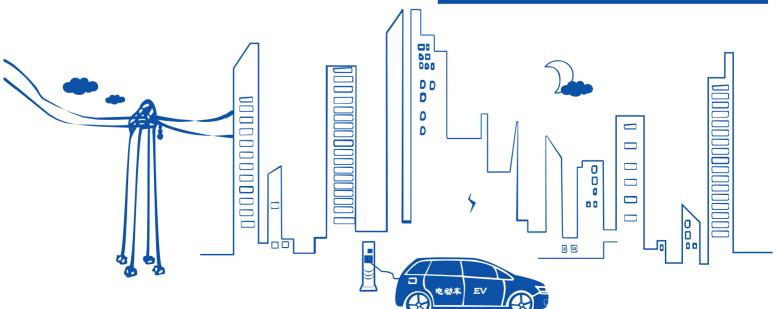
The electric vehicle, shuttling on the streets and lanes, is of zero emission, zero ollution.

Is this a dream?

This is the green dream of BYD and even all human beings. Is this a dream?

No. We are already seeing it approaching us.

"







Power up to 350W Average cell efficiency up to 18.8% High transmittance EVA up to 92%



Power output is 3% higher than the conventional modules



10 years for product25 years linear Warranty



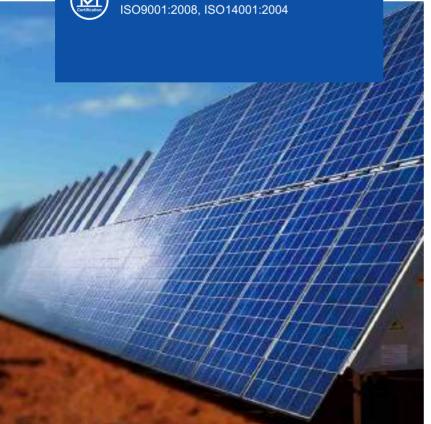
Residential roof top systems On/Off-grid commercial systems On/Off-grid utility systems

IEC 61215, IEC 61730, UL1701



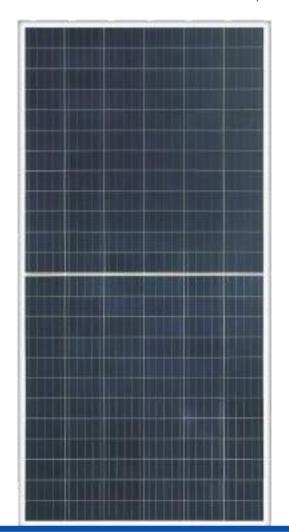
PID free
No snail trail
5400Pa for Snow Load Test
2400Pa for Wind Load Test
Lower hot spot temperature
Half cell is adopted to reduce the matching loss





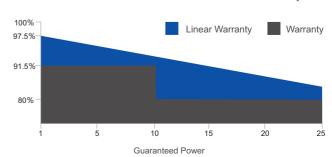
# **BYD**PV Half Cell Module

Half cell module reducing the series resistance Half cell module to increase output power Half cell module to reduce the risk of hot spot



#### PHK-36-SERIES-5BB

BYD PV Module 25 Years Linear Performance Warranty

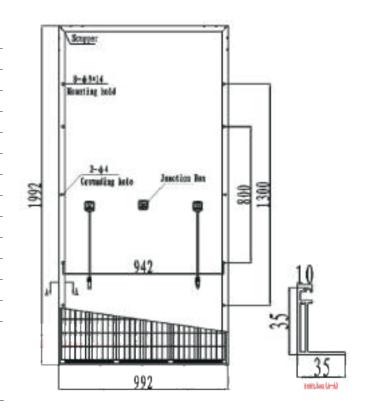




### **BYD PHK-36-SERIES-5BB** 325-350W

#### **MECHANICAL SPECIFICATIONS**

Cell	5 Bus Bar solar half cell 156.75×78.375mm			
No. of Cells	144 (12×12) per			
No. 01 Cells	144 (12×12) pcs			
Dimension of Module	1992 mm×992 mm×35 mm			
Weight	22.3 kg			
Front Glass	3.2 mm tempered glass with AR Coating			
Frame	Anodized aluminum alloy			
Junction Box	ZH011-B-5, TS03-13B			
Plug Connector	IP67			
Bypass-Diodes	3 pcs			
Type of Connector	MC4-compatible			
Max. Fuse Current Rating	15 A			
Cable Section Area	4 mm² / 0.0062 Sq in			
Cable Length	2×450 mm			



#### **TEMPERATURE COEFFICIENTS**

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Short-Circuit Current Temperature Coefficient	0.057%/℃
Open-Circuit Voltage Temperature Coefficient	-0.285%/℃
Peak Power Temperature Coefficient	-0.35%/℃

#### **Packing Information**

Packing Type	40'HQ		
Piece/Pallet	30		
Pallet/Container	22		
Piece/Container	660		

#### **ELECTRICAL SPECIFICATION**

Module Type	325PHK-36	330PHK-36	335PHK-36	340PHK-36	345PHK-36	350PHK-36
Short Circuit Current (Isc)	9.140A	9.196A	9.252A	9.308A	9.364A	9.420A
Maximum Operating Current (Imp)	8.654A	8.724A	8.794A	8.864A	8.934A	9.004A
Open Circuit Voltage (Voc)	44.94V	45.19V	45.44V	45.69V	45.94V	46.19V
Maximum Operating Voltage (Vmp)	37.57V	37.83V	38.10V	38.36V	38.62V	38.87V
Maximum Power in STC (Pmax)	325Wp	330 Wp	335 Wp	340 Wp	345Wp	350 Wp
Operating Temperature				-40°C~85°C		
Max.Fuse Current Rating	<u> </u>			15A		
Maximum System Voltage				1500VDC		
Power Tolerance				0~5W		
Application Classes				Class A		

STC: IRRADIANCE 1000W/m², Module Temperature 25  $^{\circ}$ C, AM=1.5

#### **NOCT**

Module Type	325PHK-36	330PHK-36	335PHK-36	340PHK-36	345PHK-36	350PHK-36
Short Circuit Current (Isc)	7.39A	7.43A	7.48A	7.52A	7.57A	7.61A
Maximum Operating Current (Imp)	6.86A	6.91A	6.96A	7.01A	7.07A	7.13A
Open Circuit Voltage(Voc)	42.1V	42.3V	42.5V	42.7V	42.9V	43.1V
Maximum Operating Voltage (Vmp)	35V	35.3V	35.6V	35.8V	36.1V	36.3V
Peak Power (Pmax)	240Wp	243.7Wp	247.7Wp	251.4Wp	255.1Wp	258.9Wp



## **Bloomberg NEF**

4Q 2018 Global PV Market Outlook November 19,2018

Table 3: Module manufacturers meeting Bloomberg NEF's tier 1 criteria as of 4Q 2018

Firm/brand	Annual module manufacturing capacity (MW/year)	Firm/brand	Annual module manufacturing capacity (MW/year)
Jinko*	9,000	BYD*	1,700
Canadian Solar*	8,700	Trunsun	1,600
JA Solar*	8,500	HT-SAAE*	1,500
Hanwha Q-Cells*	8,000	Waaree	1,500
Trina Solar*	8,000	Adani/Mundra*	1,500
Risen Energy	7,500	Akcome	1,400
Longi*	7,500	Kyocera	1,350
GCL*	5,400	Vikram Solar*	1,100
Talesun	4,500	ET Solar	1,000
Suntech*	3,300	Neo Solar Power/URE*	850
ZNShine*	3,200	Boviet*	800
Seraphim	3,000	Lightway	660
First Solar*	2,900	Hansol Technics	600
Chint/ Astronergy*	2,500	S-Energy	530
Phono Solar*	2,000	AU Optronics	455
Eging	2,000	Hellene*	250
LG Electronics*	2,000	Sharp	210
Renesola	2,000	Shinsung E&G	200
		Total	107,205



#### 25-Year Insurance Backed Warranty

In addition to our comprehensive Warranty Terms, BYD has purchased product warranty insurance to "back - stop" our product warranty. This insurance applies to our Limited Warranty and covers PV Modules against Product Defect and Performance output. This insurance program is purchased through our program manager, PowerGuard Specialty Insurance Services, and insured by the following reputable insurance companies:

- International Insurance Company of Hannover SE (A.M. Best Rating: A+ XV)
   www.inter-hannover.com
- RSUI Indemnity Company (A.M. Best Rating: A+ XIII) www.rsui.com

BYD customers, whose panels have been registered by us, will enjoy a global, irrevocable and immediate insurance-backed warranty which provides third-party rights to the insurance in case of insolvency or bankruptcy.

#### **Highlights:**

- Immediate coverage (no waiting period)
- 25 year non cancellable term (even if BYD becomes insolvent or bankrupt)
- A.M. Best rated "A" XIII or better reputable insurance underwriters (enhanced bankability)
- Insurance Program insures BYD's Limited Warranty, including PV Modules against Product Defect and Performance output
- Third Party policy rights (satisfies investors/bankers requirements)
- For modules sold and reported for the policy period of January 1, 2018 to January 1, 2019

Please contact BYD's Customer Service should you have any questions. In the unlikely event that BYD becomes insolvent, please e-mail to claims@powerguardins.com.

Serial number registration can be verified by simply visiting the PowerGuard's Solar Panel Program Warranty Verification Portal http://powerguardsnverify.com/, on which you will be able to input panel serial numbers and to verify they have been reported and are eligible for coverage per the terms of BYD's module manufacturers policy.



