



# **BiKu MODULE**

NEW GENERATION BIFACIAL MODULE FRONT POWER RANGE: 290W ~ 305W UP TO 30% MORE POWER FROM THE BACK SIDE CS3K-290|295|300|305PB-AG

#### **MORE POWER**



Up to 30% more power from the back side



Low NMOT:  $42 \pm 3$  °C Low temperature coefficient (Pmax): -0.37 % / °C



Better shading tolerance

# MORE RELIABLE



Lower internal current, lower hot spot temperature



Minimizes micro-cracks and snail trails



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa \*



Fire Class A and Type 3 / Type 13





5BB cell

\* Both 5BB and MBB modules will be supplied.



MBB cell



power output warranty



product warranty on materials and workmanship

#### **MANAGEMENT SYSTEM CERTIFICATES\***

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

## **PRODUCT CERTIFICATES\***

IEC 61215 / IEC 61730: VDE / CE / MCS IEC61701 ED2: VDE / IEC62716: VDE / IEC60068-2-68: SGS UL 1703: CSA Take-e-way











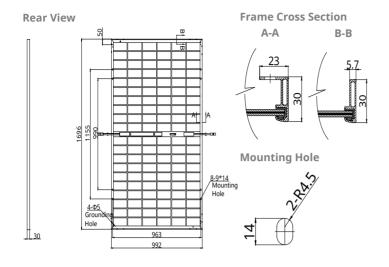


<sup>\*</sup> We can provide this product with special BOM specifically certified with salt mist, ammonia and sand blowing tests. Please talk to our local technical sales representatives to get your customized solutions.

**CANADIAN SOLAR INC.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 30 GW deployed around the world since 2001.

<sup>\*</sup> For detailed information, please refer to Installation Manual.

#### **ENGINEERING DRAWING (mm)**



### **ELECTRICAL DATA | STC\***

	Nominal Max. Power (Pmax)				Short Circuit Current (Isc)	Module Efficiency
CS3K-290PB-AG		32.3 V	8.98 A	38.9 V	9.49 A	17.24%
%	305 W	32.3 V	9.43 A	38.9 V	9.96 A	18.13%
)%	319 W	32.3 V	9.88 A	38.9 V	10.44 A	18.96%
0%	348 W	32.3 V	10.78 A	38.9 V	11.39 A	20.68%
)%	377 W	32.3 V	11.67 A	38.9 V	12.34 A	22.41%
ΑG	295 W	32.5 V	9.08 A	39.1 V	9.57 A	17.53%
%	310 W	32.5 V	9.53 A	39.1 V	10.05 A	18.43%
)%	325 W	32.5 V	9.99 A	39.1 V	10.53 A	19.32%
)%	354 W	32.5 V	10.9 A	39.1 V	11.48 A	21.04%
)%	384 W	32.5 V	11.8 A	39.1 V	12.44 A	22.82%
AG	300 W	32.7 V	9.18 A	39.3 V	9.65 A	17.83%
%	315 W	32.7 V	9.64 A	39.3 V	10.13 A	18.72%
)%	330 W	32.7 V	10.1 A	39.3 V	10.62 A	19.61%
)%	360 W	32.7 V	11.02 A	39.3 V	11.58 A	21.40%
)%	390 W	32.7 V	11.93 A	39.3 V	12.55 A	23.18%
٩G	305 W	32.9 V	9.28 A	39.5 V	9.73 A	18.13%
%	320 W	32.9 V	9.74 A	39.5 V	10.22 A	19.02%
)%	336 W	32.9 V	10.21 A	39.5 V	10.7 A	19.97%
)%	366 W	32.9 V	11.14 A	39.5 V	11.68 A	21.75%
)%	397 W	32.9 V	12.06 A	39.5 V	12.65 A	23.60%
	% )% )% )% )% )% )% )% )% )% )% )% )% )%	Max. Power (Pmax) AG 290 W % 305 W 319 W 348 W 377 W AG 295 W % 310 W 325 W 354 W 363 300 W 363 300 W 360 W	Max. Power (Pmax) Voltage (Vmp)  AG 290 W 32.3 V  305 W 32.3 V  306 319 W 32.3 V  307 W 32.3 V  308 377 W 32.3 V  309 325 W 32.5 V  300 325 W 32.5 V  301 325 W 32.5 V  302 300 W 32.7 V  303 300 W 32.7 V  304 330 W 32.7 V  305 330 W 32.7 V  306 300 W 32.7 V  307 330 W 32.7 V  308 330 W 32.7 V  309 330 W 32.7 V  309 330 W 32.7 V  309 320 W 32.9 V  300 336 W 32.9 V  301 336 W 32.9 V  302 W 32.9 V  303 366 W 32.9 V  304 397 W 32.9 V	Max. Power (Pmax) Voltage Current (Imp)  AG 290 W 32.3 V 8.98 A  305 W 32.3 V 9.43 A  306 319 W 32.3 V 10.78 A  307 W 32.3 V 11.67 A  308 377 W 32.3 V 11.67 A  309 325 W 32.5 V 9.98 A  300 325 W 32.5 V 9.99 A  300 325 W 32.5 V 10.9 A  301 325 W 32.5 V 10.9 A  302 325 W 32.5 V 10.9 A  303 325 W 32.5 V 10.9 A  304 325 W 32.5 V 11.8 A  305 325 W 32.5 V 11.8 A  326 300 W 32.7 V 11.8 A  327 V 9.64 A  330 W 32.7 V 10.1 A  346 305 W 32.7 V 11.02 A  350 W 32.7 V 11.93 A  360 W 32.7 V 11.93 A  360 W 32.7 V 11.93 A  360 W 32.9 V 9.28 A  360 320 W 32.9 V 9.74 A  360 336 W 32.9 V 10.21 A  360 366 W 32.9 V 11.14 A  360 366 W 32.9 V 11.14 A  360 366 W 32.9 V 11.14 A	Max. Power (Pmax)         Operating Operating Current (Voltage (Vmp))         Current (Imp)         Current (Voltage (Imp))         Current (Voltage (Imp))         Current (Voltage (Vmp))         Current (Imp)         Voltage (Voc)           AG         290 W         32.3 V         8.98 A         38.9 V           305 W         32.3 V         9.88 A         38.9 V           306 319 W         32.3 V         10.78 A         38.9 V           307 W         32.3 V         11.67 A         38.9 V           308 37 W         32.3 V         11.67 A         38.9 V           310 W         32.5 V         9.08 A         39.1 V           325 W         32.5 V         9.99 A         39.1 V           325 W         32.5 V         9.99 A         39.1 V           325 W         32.5 V         10.9 A         39.1 V           36 30 W         32.5 V         11.8 A         39.1 V           36 30 W         32.7 V         9.18 A         39.3 V           36 30 W         32.7 V         10.1 A         39.3 V           36 30 W         32.7 V         11.02 A         39.3 V           36 30 W         32.7 V         11.02 A         39.3 V           36 30 W         32.7 V         11.93	Max. Power (Pmax)         Operating Operating Current (Voltage (Vmp))         Current (Voltage (Usc))         Circuit Current (Usc)           AG         290 W         32.3 V         8.98 A         38.9 V         9.49 A           36         305 W         32.3 V         9.43 A         38.9 V         9.96 A           306         319 W         32.3 V         9.88 A         38.9 V         10.44 A           306         348 W         32.3 V         10.78 A         38.9 V         11.39 A           307         377 W         32.3 V         11.67 A         38.9 V         12.34 A           306         377 W         32.5 V         9.08 A         39.1 V         10.05 A           310 W         32.5 V         9.99 A         39.1 V         10.05 A           307         354 W         32.5 V         9.99 A         39.1 V         10.53 A           36         384 W         32.5 V         10.9 A         39.1 V         11.48 A           36         384 W         32.7 V         9.18 A         39.3 V         10.13 A           36         315 W         32.7 V         9.64 A         39.3 V         10.62 A           36         390 W         32.

<sup>\*</sup> Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

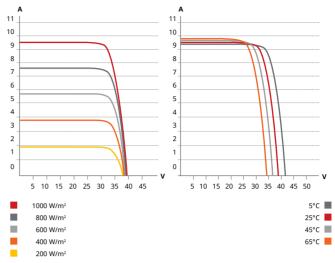
#### **ELECTRICAL DATA**

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC) or 1000 V (IEC/UL)
Module Fire Performance	TYPE 3 / Type 13 (UL 1703)
Module Fire Performance	or CLASS A (IEC61730)
Max. Series Fuse Rating	20 A
<b>Application Classification</b>	Class A
Power Tolerance	0 ~ + 5 W
Power Bifaciality*	72 %

<sup>\*</sup> Power Bifaciality = Pmax\_{rear} / Pmax\_{front'} both Pmax\_{rear} and Pmax\_{front} are tested under STC, Bifaciality Tolerance:  $\pm\,5~\%$ 

Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

#### CS3K-290PB-AG / I-V CURVES



#### **ELECTRICAL DATA | NMOT\***

	Nominal Max. Power (Pmax)		Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS3K-290PB-AG	216 W	29.8 V	7.22 A	36.5 V	7.66 A
CS3K-295PB-AG	219 W	30.0 V	7.30 A	36.7 V	7.72 A
CS3K-300PB-AG	223 W	30.2 V	7.38 A	36.8 V	7.78 A
CS3K-305PB-AG	227 W	30.4 V	7.46 A	37.0 V	7.85 A

<sup>\*</sup> Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m2, spectrum AM 1.5, ambient temperature  $20^{\circ}$ C, wind speed 1 m/s.

#### **MECHANICAL DATA**

Specification	Data
Cell Type	Poly-crystalline
Cell Arrangement	120 [2 x (10 x 6)]
Dimensions	1696 × 992 × 30 mm (66.8 × 39.1 × 1.18 in)
Weight	22.1 kg (48.7 lbs)
Front / Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cable	4.0 mm <sup>2</sup> (IEC), 12 AWG (UL)
Cable Length (Including Connector)	Portrait: 400 mm (15.7 in) (+) / 280 mm (11.0 in) (-), landscape: 1250 mm (49.2 in)*
Connector	T4 series
Per Pallet	35 pieces
Per Container (40' HQ	)910 pieces

<sup>\*</sup> For detailed information, please contact your local Canadian Solar sales and technical representatives.

# **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.37 % / °C
Temperature Coefficient (Voc)	-0.29 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

## PARTNER SECTION

<sup>\*\*</sup> Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

<sup>\*</sup> The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Canadian Solar Inc. reserves the right to make necessary adjustment to the information described herein at any time without further notice.