



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



FRONT

BACK



5BB cell



MBB cell

* Both 5BB and MBB modules will be supplied.

MORE POWER



Up to 30% more power from the back side



Low NMOT: 42 ± 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



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

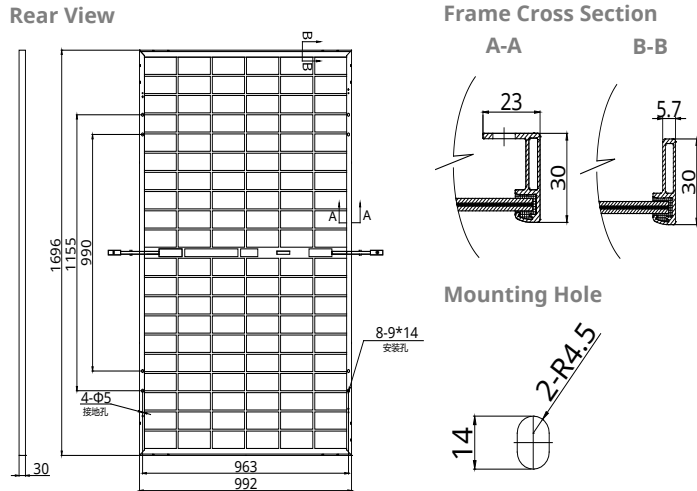
PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE / CE (Expected in November, 2018)
UL 1703: CSA (Expected in December, 2018)

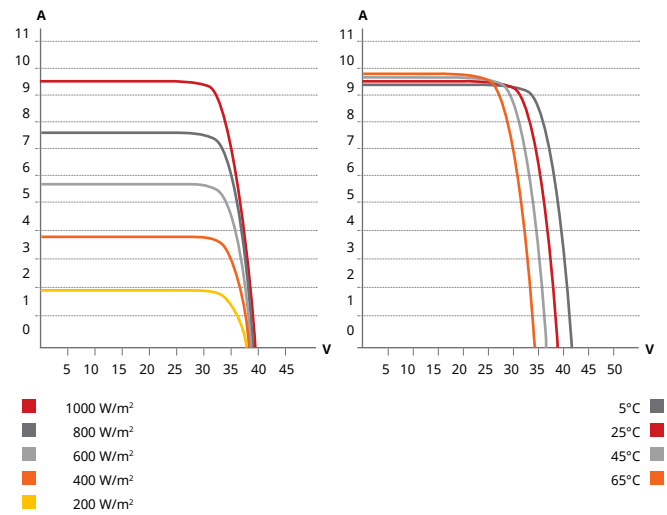
CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar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

* For detailed information, please refer to Installation Manual.

ENGINEERING DRAWING (mm)



CS3K-290PB-AG / I-V CURVES



ELECTRICAL DATA | STC*

| | Nominal Max. Power (Pmax) | Opt. Operating Voltage (Vmp) | Opt. Operating Current (Imp) | Open Circuit Voltage (Voc) | Short Circuit Current (Isc) | Module Efficiency |
|------------------------|---------------------------|------------------------------|------------------------------|----------------------------|-----------------------------|-------------------|
| CS3K-290PB-AG | 290 W | 32.3 V | 8.98 A | 38.9 V | 9.49 A | 17.24% |
| Bifacial Gain** | 5% | 305 W | 32.3 V | 9.43 A | 38.9 V | 18.13% |
| | 10% | 319 W | 32.3 V | 9.88 A | 38.9 V | 18.96% |
| | 20% | 348 W | 32.3 V | 10.78 A | 38.9 V | 20.68% |
| | 30% | 377 W | 32.3 V | 11.67 A | 38.9 V | 22.41% |
| CS3K-295PB-AG | 295 W | 32.5 V | 9.08 A | 39.1 V | 9.57 A | 17.53% |
| Bifacial Gain** | 5% | 310 W | 32.5 V | 9.53 A | 39.1 V | 18.43% |
| | 10% | 325 W | 32.5 V | 9.99 A | 39.1 V | 19.32% |
| | 20% | 354 W | 32.5 V | 10.9 A | 39.1 V | 21.04% |
| | 30% | 384 W | 32.5 V | 11.8 A | 39.1 V | 22.82% |
| CS3K-300PB-AG | 300 W | 32.7 V | 9.18 A | 39.3 V | 9.65 A | 17.83% |
| Bifacial Gain** | 5% | 315 W | 32.7 V | 9.64 A | 39.3 V | 18.72% |
| | 10% | 330 W | 32.7 V | 10.1 A | 39.3 V | 19.61% |
| | 20% | 360 W | 32.7 V | 11.02 A | 39.3 V | 21.40% |
| | 30% | 390 W | 32.7 V | 11.93 A | 39.3 V | 23.18% |
| CS3K-305PB-AG | 305 W | 32.9 V | 9.28 A | 39.5 V | 9.73 A | 18.13% |
| Bifacial Gain** | 5% | 320 W | 32.9 V | 9.74 A | 39.5 V | 19.02% |
| | 10% | 336 W | 32.9 V | 10.21 A | 39.5 V | 19.97% |
| | 20% | 366 W | 32.9 V | 11.14 A | 39.5 V | 21.75% |
| | 30% | 397 W | 32.9 V | 12.06 A | 39.5 V | 23.60% |

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

** 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.

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) or CLASS A (IEC61730) |
| Max. Series Fuse Rating | 20 A |
| Application Classification | Class A |
| Power Tolerance | 0 ~ + 5 W |
| Power Bifaciality* | 70 % |

* Power Bifaciality = $P_{max_rear} / P_{max_front}$, both P_{max_rear} and P_{max_front} are tested under STC, Bifaciality Tolerance: $\pm 5\%$

* This is preliminary datasheet and for reference only. 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.

ELECTRICAL DATA | NMOT*

| | Nominal Max. Power (Pmax) | Opt. Operating Voltage (Vmp) | 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 |

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

| Specification | Data |
|--------------------|--|
| Cell Type | Poly-crystalline |
| Cell Arrangement | 120 [2 x (10 x 6)] |
| Dimensions | 1696 x 992 x 30 mm (66.8 x 39.1 x 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 mm² (IEC), 12 AWG (UL) |

Cable Length (Including Connector) Portrait: 400 mm (15.7 in) (+) / 200 mm (7.9 in) (-), landscape: 1160 mm (45.7 in)*

| | |
|------------------------|------------|
| Connector | T4 series |
| Per Pallet | 35 pieces |
| Per Container (40' HQ) | 910 pieces |

* 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 \pm 3°C |

PARTNER SECTION

CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, www.canadiansolar.com, support@canadiansolar.com