



BiHiKu5 Poly

BIFACIAL POLY PERC

425 W ~ 450 W

UP TO 30% MORE POWER FROM THE BACK SIDE

CS3Y-425 | 430 | 435 | 440 | 445 | 450PB-AG

MORE POWER



Module power up to 450 W
Module efficiency up to 19.0 %



Lower LCOE & BOS cost,
cost effective product for utility power plant



Comprehensive LID / LeTID mitigation
technology, up to 50% lower degradation



Compatible with mainstream trackers



Better shading tolerance

MORE RELIABLE



Carbon footprint reduced up to 25%



Minimizes micro-crack impacts



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



Enhanced Product Warranty on Materials
and Workmanship*



Linear Power Performance Warranty*

1st year power degradation no more than 2%
Subsequent annual power degradation no more than 0.45%

*According to the applicable Canadian Solar Limited Warranty Statement.

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*

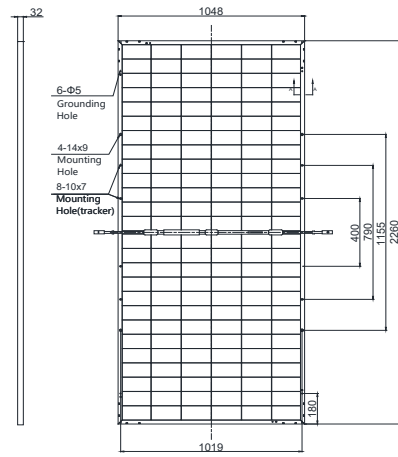
* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

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 40 GW deployed around the world since 2001.

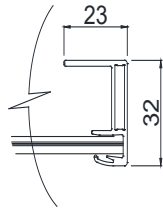
* For detailed information, please refer to the Installation Manual.

ENGINEERING DRAWING (mm)

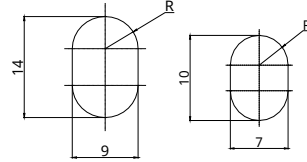
Rear View



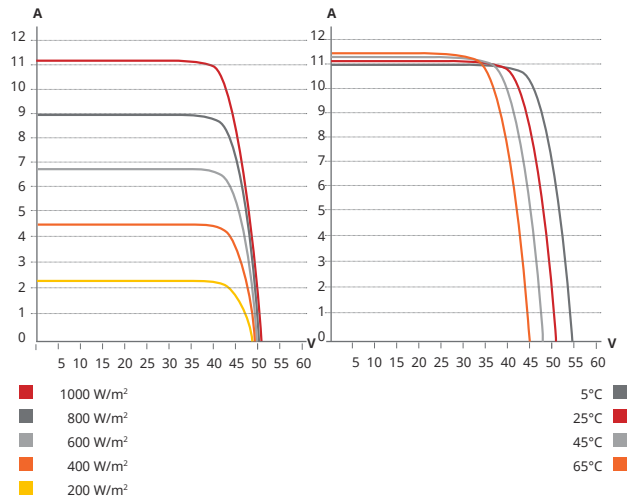
Frame Cross Section A-A



Mounting Hole



CS3Y-440PB-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
CS3Y-425PB-AG	425 W	41.4 V	10.27 A	50.6 V	11.03 A	17.9%
Bifacial Gain**	5% 446 W	41.4 V	10.94 A	50.6 V	11.58 A	18.8%
	10% 468 W	41.4 V	11.31 A	50.6 V	12.13 A	19.8%
	20% 510 W	41.4 V	12.32 A	50.6 V	13.24 A	21.5%
	30% 553 W	41.4 V	13.36 A	50.6 V	14.34 A	23.3%
CS3Y-430PB-AG	430 W	41.6 V	10.34 A	50.8 V	11.08 A	18.2%
Bifacial Gain**	5% 452 W	41.6 V	10.87 A	50.8 V	11.63 A	19.1%
	10% 473 W	41.6 V	11.37 A	50.8 V	12.19 A	20.0%
	20% 516 W	41.6 V	12.41 A	50.8 V	13.30 A	21.8%
	30% 559 W	41.6 V	13.44 A	50.8 V	14.40 A	23.6%
CS3Y-435PB-AG	435 W	41.8 V	10.41 A	51.0 V	11.13 A	18.4%
Bifacial Gain**	5% 457 W	41.8 V	10.94 A	51.0 V	11.69 A	19.3%
	10% 479 W	41.8 V	11.46 A	51.0 V	12.24 A	20.2%
	20% 522 W	41.8 V	12.49 A	51.0 V	13.36 A	22.0%
	30% 566 W	41.8 V	13.55 A	51.0 V	14.47 A	23.9%
CS3Y-440PB-AG	440 W	42.0 V	10.48 A	51.2 V	11.18 A	18.6%
Bifacial Gain**	5% 462 W	42.0 V	11.00 A	51.2 V	11.74 A	19.5%
	10% 484 W	42.0 V	11.53 A	51.2 V	12.30 A	20.4%
	20% 528 W	42.0 V	12.58 A	51.2 V	13.42 A	22.3%
	30% 572 W	42.0 V	13.62 A	51.2 V	14.53 A	24.2%
CS3Y-445PB-AG	445 W	42.2 V	10.55 A	51.4 V	11.23 A	18.8%
Bifacial Gain**	5% 467 W	42.2 V	11.08 A	51.4 V	11.79 A	19.7%
	10% 490 W	42.2 V	11.62 A	51.4 V	12.35 A	20.7%
	20% 534 W	42.2 V	12.66 A	51.4 V	13.48 A	22.5%
	30% 579 W	42.2 V	13.73 A	51.4 V	14.60 A	24.4%
CS3Y-450PB-AG	450 W	42.4 V	10.62 A	51.6 V	11.28 A	19.0%
Bifacial Gain**	5% 473 W	42.4 V	11.16 A	51.6 V	11.84 A	20.0%
	10% 495 W	42.4 V	11.68 A	51.6 V	12.41 A	20.9%
	20% 540 W	42.4 V	12.74 A	51.6 V	13.54 A	22.8%
	30% 585 W	42.4 V	13.81 A	51.6 V	14.66 A	24.7%

* 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/UL) or 1000 V (IEC/UL)
Module Fire Performance	TYPE 3 (UL 61730) or CLASS C (IEC61730)
Max. Series Fuse Rating	25 A
Application Classification	Class A
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	70 %

* Power Bifaciality = Pmax_{rear} / Pmax_{front}, both Pmax_{rear} and Pmax_{front} are tested under STC, Bifaciality Tolerance: ± 5 %

* 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.
 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.

ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS3Y-425PB-AG	318 W	38.7 V	8.22 A	47.7 V	8.89 A
CS3Y-430PB-AG	321 W	38.9 V	8.26 A	47.9 V	8.93 A
CS3Y-435PB-AG	325 W	39.1 V	8.32 A	48.0 V	8.98 A
CS3Y-440PB-AG	329 W	39.2 V	8.40 A	48.2 V	9.02 A
CS3Y-445PB-AG	333 W	39.4 V	8.46 A	48.4 V	9.06 A
CS3Y-450PB-AG	336 W	39.6 V	8.49 A	48.6 V	9.10 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	156 [2X (13 X6)]
Dimensions	2260 × 1048 × 32 mm (89.0 × 41.3 × 1.26 in)
Weight	29.9 kg (65.9 lbs)
Front / Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	400 mm (15.7 in) (+) / 280 mm (11.0 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	33 pieces

Per Container (40' HQ) 660 pieces or 528 pieces (only for US)
 * For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.36 % / °C
Temperature Coefficient (Voc)	-0.28 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION



CANADIAN SOLAR INC.

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