



BiHiKu5465 W ~ 490 W BIFACIAL MONO PERC CS3Y-465 | 470 | 475 | 480 | 485 | 490MB-AG

MORE POWER



Module power up to 490 W Module efficiency up to 20.7 %



Up to 11.5 % lower LCOE Up to 3.2 % lower system cost



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



Compatible with mainstream trackers, cost effective product for utility power plant



Better shading tolerance

MORE RELIABLE



Minimizes micro-crack impacts



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

12 Years

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
ISO 45001: 2018 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730 / CE / MCS / INMETRO CEC listed (US California) / FSEC (US Florida) UL 61730 / IEC 61701 / IEC 62716 / IEC 60068-2-68 Take-e-wav











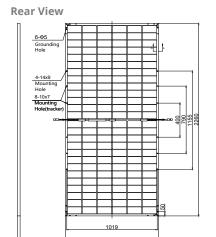
^{*} The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading PV project developer and manufacturer of solar modules, with over 52 GW deployed around the world since 2001.

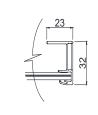
FRONT

 $[\]ensuremath{^{\star}}$ For detailed information, please refer to the Installation Manual.

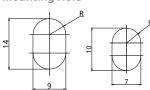
ENGINEERING DRAWING (mm)



Frame Cross Section A-A



Mounting Hole



CS3Y-480MB-AG / I-V CURVES

12 -		12-
11 -		11
10 -	·	10
9 -		9
8 -	\	8-
7 -		7
6 -	<u> </u>	6
5 -		5
4 -		4
3 -		3
2 -		2
1 -		1
0	 	v ⁰
	5 10 15 20 25 30 35 40 45 50 55 60	5 10 15 20 25 30 35 40 45 50 55 60
	1000 W/m ²	5°C ■
	800 W/m ²	25°C
	600 W/m ²	45°C ■
	400 W/m ²	65°C ■
	200 W/m ²	

ELECTRICAL DATA | STC*

		Nominal Max.	Opt. Operating	Opt. Operating	Open Circuit	Short Circuit	Module
		Power (Pmax)	Voltage (Vmp)	Ċurrent (Imp)	Voltage (Voc)	Current (Isc)	Efficiency
CS3Y-465MB-AG		465 W	43.6 V	10.67 A	52.3 V	11.42 A	19.6%
D:6 : 1	5%	488 W	43.6 V	11.20 A	52.3 V	11.99 A	20.6%
Bifacial Gain**	10%	512 W	43.6 V	11.75 A	52.3 V	12.56 A	21.6%
Gaill	20%	558 W	43.6 V	12.80 A	52.3 V	13.70 A	23.6%
CS3Y-470MB-AG		470 W	43.8 V	10.74 A	52.5 V	11.47 A	19.8%
D:6:-1	5%	494 W	43.8 V	11.29 A	52.5 V	12.04 A	20.9%
Bifacial Gain**	10%	517 W	43.8 V	11.81 A	52.5 V	12.62 A	21.8%
Gaill	20%	564 W	43.8 V	12.89 A	52.5 V	13.76 A	23.8%
CS3Y-475N	/IB-AG	475 W	44.0 V	10.81 A	52.7 V	11.52 A	20.1%
D:6:-1	5%	499 W	44.0 V	11.35 A	52.7 V	12.10 A	21.1%
Bifacial Gain**	10%	523 W	44.0 V	11.89 A	52.7 V	12.67 A	22.1%
daiii	20%	570 W	44.0 V	12.97 A	52.7 V	13.82 A	24.1%
CS3Y-480N	/IB-AG	480 W	44.2 V	10.87 A	52.9 V	11.57 A	20.3%
D:6 : 1	5%	504 W	44.2 V	11.41 A	52.9 V	12.15 A	21.3%
Bifacial Gain**	10%	528 W	44.2 V	11.96 A	52.9 V	12.73 A	22.3%
daiii	20%	576 W	44.2 V	13.04 A	52.9 V	13.88 A	24.3%
CS3Y-485N	/IB-AG	485 W	44.4 V	10.94 A	53.1 V	11.62 A	20.5%
D:6 : 1	5%	509 W	44.4 V	11.49 A	53.1 V	12.20 A	21.5%
Bifacial Gain**	10%	534 W	44.4 V	12.03 A	53.1 V	12.78 A	22.5%
daiii	20%	582 W	44.4 V	13.13 A	53.1 V	13.94 A	24.6%
CS3Y-490MB-		490 W	44.6 V	11.00 A	53.3 V	11.67 A	20.7%
D:6 : 1	5%	515 W	44.6 V	11.55 A	53.3 V	12.25 A	21.7%
Bifacial Gain**	10%	539 W	44.6 V	12.10 A	53.3 V	12.84 A	22.8%
Jaiii	20%	588 W	44.6 V	13.20 A	53.3 V	14.00 A	24.8%
* Under Stand	and Tock	Conditions	CTC) of irradia	nco of 1000 W	Im2 cnact	rum ANA 1 E	and call

^{*} Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell

ELECTRICAL DATA | NMOT*

	Nominal	Opt.	Opt.	Open	Short
	Max. Power (Pmax)	Voltage (Vmp)	Operating Current (Imp)	Circuit Voltage (Voc)	Circuit Current (Isc)
CS3Y-465MB-AG	348 W	40.9 V	8.51 A	49.4 V	9.21 A
CS3Y-470MB-AG	352 W	41.1 V	8.57 A	49.6 V	9.25 A
CS3Y-475MB-AG	356 W	41.2 V	8.65 A	49.8 V	9.29 A
CS3Y-480MB-AG	359 W	41.4 V	8.68 A	50.0 V	9.33 A
CS3Y-485MB-AG	363 W	41.6 V	8.73 A	50.2 V	9.37 A
CS3Y-490MB-AG	367 W	41.8 V	8.78 A	50.4 V	9.41 A
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^{*} 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	Mono-crystalline
Cell Arrangement	156 [2 X (13 X 6)]
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 mm² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	410 mm (16.1 in) (+) / 290 mm (11.4 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	33 pieces

Per Container (40' HQ) 660 pieces or 594 pieces (only for US)

ELECTRICAL DATA

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL) or 1000 V (IEC/UL)
Module Fire Performance	TYPE 29 (UL 61730)
Module Fire Performance	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 %

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.34 % / °C
Temperature Coefficient (Voc)	-0.26 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

$\mbox{\ensuremath{^{\star}}}$ 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. CSI Solar Co., Ltd. $\,$ 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.

PARTNER SECTION

^{**} 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.

^{*} For detailed information, please contact your local Canadian Solar sales and technical representatives.