



BiHiKu7

BIFACIAL MONO PERC 640 W ~ 670 W

CS7N-640 | 645 | 650 | 655 | 660 | 665 | 670MB-AG



MORE POWER



Module power up to 670 W Module efficiency up to 21.6 %



Up to 8.9 % lower LCOE Up to 4.6 % 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

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*

MORE RELIABLE



40 °C lower hot spot temperature, greatly reduce module failure rate



Minimizes micro-crack impacts



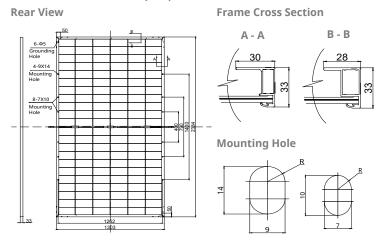
Heavy snow load up to 5400 Pa, wind load up to 2400 Pa*

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 20 years, it has successfully delivered over 70 GW of premium-quality solar modules across the world.

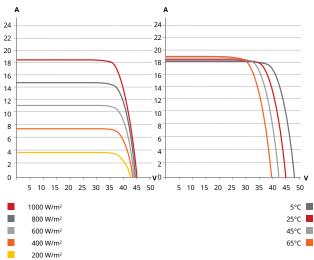
^{*} The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates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

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

ENGINEERING DRAWING (mm)



CS7N-650MB-AG / I-V CURVES



ELECTRICAL DATA | STC*

		Nominal Max. Power (Pmax)		Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Module Efficiency
CS7N-640MB-AG		640 W	37.5 V	17.07 A	44.6 V	18.31 A	20.6%
Bifacial Gain**	5%	672 W	37.5 V	17.92 A	44.6 V	19.23 A	21.6%
	10%	704 W	37.5 V	18.78 A	44.6 V	20.14 A	22.7%
	20%	768 W	37.5 V	20.48 A	44.6 V	21.97 A	24.7%
CS7N-645MB-AG		645 W	37.7 V	17.11 A	44.8 V	18.35 A	20.8%
Diferial	5%	677 W	37.7 V	17.97 A	44.8 V	19.27 A	21.8%
Bifacial Gain**	10%	710 W	37.7 V	18.84 A	44.8 V	20.19 A	22.9%
Gain""	20%	774 W	37.7 V	20.53 A	44.8 V	22.02 A	24.9%
CS7N-650MB-AG		650 W	37.9 V	17.16 A	45.0 V	18.39 A	20.9%
D:f:-1	5%	683 W	37.9 V	18.03 A	45.0 V	19.31 A	22.0%
Bifacial Gain**	10%	715 W	37.9 V	18.88 A	45.0 V	20.23 A	23.0%
Gaiii	20%	780 W	37.9 V	20.59 A	45.0 V	22.07 A	25.1%
CS7N-655N	/IB-AG	655 W	38.1 V	17.20 A	45.2 V	18.43 A	21.1%
D:f:-1	5%	688 W	38.1 V	18.06 A	45.2 V	19.35 A	22.1%
Bifacial Gain**	10%	721 W	38.1 V	18.93 A	45.2 V	20.27 A	23.2%
Guiii	20%	786 W	38.1 V	20.64 A	45.2 V	22.12 A	25.3%
CS7N-660MB-AG		660 W	38.3 V	17.24 A	45.4 V	18.47 A	21.2%
	5%	693 W	38.3 V	18.10 A	45.4 V	19.39 A	22.3%
Bifacial Gain**	10%	726 W	38.3 V	18.96 A	45.4 V	20.32 A	23.4%
Gaill	20%	792 W	38.3 V	20.69 A	45.4 V	22.16 A	25.5%
CS7N-665MB-AG		665 W	38.5 V	17.28 A	45.6 V	18.51 A	21.4%
Bifacial Gain**	5%	698 W	38.5 V	18.14 A	45.6 V	19.44 A	22.5%
	10%	732 W	38.5 V	19.02 A	45.6 V	20.36 A	23.6%
	20%	798 W	38.5 V	20.74 A	45.6 V	22.21 A	25.7%
CS7N-670MB-AG		670 W	38.7 V	17.32 A	45.8 V	18.55 A	21.6%
Bifacial Gain**	5%	704 W	38.7 V	18.20 A	45.8 V	19.48 A	22.7%
	10%	737 W	38.7 V	19.05 A	45.8 V	20.41 A	23.7%
	20%	804 W	38.7 V	20.78 A	45.8 V	22.26 A	25.9%
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^{*} Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)		Short Circuit Current (Isc)
CS7N-640MB-AG	480 W	35.2 V	13.64 A	42.2 V	14.77 A
CS7N-645MB-AG	484 W	35.3 V	13.72 A	42.3 V	14.80 A
CS7N-650MB-AG	487 W	35.5 V	13.74 A	42.5 V	14.83 A
CS7N-655MB-AG	491 W	35.7 V	13.76 A	42.7 V	14.86 A
CS7N-660MB-AG	495 W	35.9 V	13.79 A	42.9 V	14.89 A
CS7N-665MB-AG	499 W	36.1 V	13.83 A	43.1 V	14.93 A
CS7N-670MB-AG	502 W	36.3 V	13.85 A	43.3 V	14.96 A
* Under Naminal Modu	le Operating	Temperature (NMOT) irradia	nce of 800	W/m²,

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

Data

MECHANICAL DATA

Specification

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2384 × 1303 × 33 mm (93.9 × 51.3 × 1.30 in)
Weight	37.8 kg (83.3 lbs)
Front Glass	2.0 mm heat strengthened glass with anti- reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm ² (IEC), 10 AWG (UL)
Cable Length (Including Connector)	460 mm (18.1 in) (+) / 340 mm (13.4 in) (-) or customized length*
Connector	T6 or MC4-EVO2
Per Pallet	33 pieces
Day Cantainay (401 110)	FOA minana ay 462 minana (aydu fay 116)

Per Container (40' HQ) 594 pieces or 462 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) or CLASS C (IEC61730)
Max. Series Fuse Rating	35 A
Application Classification	Class A
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	70 %
* Dower Difaciality - Dmay / Dm	both Broad and Broad are tested under STC Bifaciality

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. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without

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.

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

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.