

# Section CanadianSolar



# **TOPBiHiKu7** N-type Bifacial TOPCon Technology 675 W ~ 705 W

CS7N-675|680|685|690|695|700|705TB-AG

# **MORE POWER**



Module power up to 705 W Module efficiency up to 22.7 %

Up to 85% Power Bifaciality, more power from the back side

Excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield

Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate

Lower LCOE & system cost

# MORE RELIABLE



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\*

# 1<sup>st</sup> year power degradation no more than 1% Subsequent annual power degradation no more than 0.4%

\*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 IEC 62941: 2019 / Photovoltaic module manufacturing quality system

.....

# **PRODUCT CERTIFICATES\***

IEC 61215 / IEC 61730 / CE / INMETRO / MCS / UKCA / CGC CEC listed (US California) / FSEC (US Florida) UL 61730 / IEC 61701 / IEC 62716 / IEC 60068-2-68 UNI 9177 Reaction to Fire: Class 1 / Take-e-way



\* 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 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 22 years, it has successfully delivered over 100 GW of premium-quality solar modules across the world.

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

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





#### CS7N-680TB-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
CS7N-675TB-AG		675 W	39.0 V	17.31 A	46.9 V	18.24 A	21.7%
Bifacial Gain**	5%	709 W	39.0 V	18.19 A	46.9 V	19.15 A	22.8%
	10%	743 W	39.0 V	19.04 A	46.9 V	20.06 A	23.9%
	20%	810 W	39.0 V	20.77 A	46.9 V	21.89 A	26.1%
CS7N-680TB-AG		680 W	39.2 V	17.35 A	47.1 V	18.29 A	21.9%
Bifacial Gain**	5%	714 W	39.2 V	18.22 A	47.1 V	19.20 A	23.0%
	10%	748 W	39.2 V	19.09 A	47.1 V	20.12 A	24.1%
	20%	816 W	39.2 V	20.82 A	47.1 V	21.95 A	26.3%
CS7N-685TB-AG		685 W	39.4 V	17.39 A	47.3 V	18.34 A	22.1%
	5%	719 W	39.4 V	18.26 A	47.3 V	19.26 A	23.1%
Bifacial Gain**	10%	754 W	39.4 V	19.14 A	47.3 V	20.17 A	24.3%
Gam	20%	822 W	39.4 V	20.87 A	47.3 V	22.01 A	26.5%
CS7N-690TB-AG		690 W	39.6 V	17.43 A	47.5 V	18.39 A	22.2%
	5%	725 W	39.6 V	18.31 A	47.5 V	19.31 A	23.3%
Bifacial Gain**	10%	759 W	39.6 V	19.17 A	47.5 V	20.23 A	24.4%
	20%	828 W	39.6 V	20.92 A	47.5 V	22.07 A	26.7%
CS7N-695TB-AG		695 W	39.8 V	17.47 A	47.7 V	18.44 A	22.4%
Bifacial Gain**	5%	730 W	39.8 V	18.34 A	47.7 V	19.36 A	23.5%
	10%	765 W	39.8 V	20.18 A	47.7 V	20.28 A	24.6%
	20%	834 W	39.8 V	20.96 A	47.7 V	22.13 A	26.8%
CS7N-700TB-AG		700 W	40.0 V	17.51 A	47.9 V	18.49 A	22.5%
Bifacial Gain**	5%	735 W	40.0 V	18.39 A	47.9 V	19.41 A	23.7%
	10%	770 W	40.0 V	20.22 A	47.9 V	20.34 A	24.8%
	20%	840 W	40.0 V	21.01 A	47.9 V	22.19 A	27.0%
CS7N-705TB-AG		705 W	40.2 V	17.55 A	48.1 V	18.54 A	22.7%
Bifacial Gain**	5%	740 W	40.2 V	18.43 A	48.1 V	19.47 A	23.8%
	10%	776 W	40.2 V	20.27 A	48.1 V	20.39 A	25.0%
	20%	846 W	40.2 V	21.06 A	48.1 V	22.25 A	27.2%
t Under Stendend Test Canditions (CTC) of impediance of 1000 M/(st) and the state of 1000 M/(st)							

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, 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	e 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*	80 %
* Devuer Difeciality - Desey / Dee	and Real and Real are tested under STC Riferiality

Power Bifaciality = Pmax<sub>rear</sub> / Pmax<sub>front</sub>, both Pmax<sub>rear</sub> and Pmax<sub>front</sub> 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 further notice.

Please be kindly advised that PV modules should be handled and installed by gualified 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. Ope- rating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS7N-675TB-AG	510 W	36.9 V	13.84 A	44.4 V	14.71 A
CS7N-680TB-AG	514 W	37.1 V	13.88 A	44.6 V	14.75 A
CS7N-685TB-AG	518 W	37.2 V	13.91 A	44.8 V	14.79 A
CS7N-690TB-AG	522 W	37.4 V	13.94 A	45.0 V	14.83 A
CS7N-695TB-AG	526 W	37.6 V	13.97 A	45.2 V	14.87 A
CS7N-700TB-AG	529 W	37.8 V	14.00 A	45.4 V	14.91 A
CS7N-705TB-AG	533 W	38.0 V	14.03 A	45.5 V	14.95 A
* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m <sup>2,</sup>					

spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

#### **MECHANICAL DATA**

Data
TOPCon cells
132 [2 x (11 x 6) ]
2384 × 1303 × 33 mm (93.9 × 51.3 × 1.30 in)
37.8 kg (83.3 lbs)
2.0 mm heat strengthened glass with anti- reflective coating
2.0 mm heat strengthened glass
Anodized aluminium alloy
IP68, 3 bypass diodes
4.0 mm² (IEC), 12 AWG (UL)
410 mm (16.1 in) (+) / 250 mm (9.8 in) (-) or customized length*
T6 or MC4-EVO2 or MC4-EVO2A
33 pieces
594 pieces or 495 pieces (only for US & Canada)

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

#### **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	41 ± 3°C

#### PARTNER SECTION



CSI Solar Co., Ltd. 199 Lushan Road, SND, Suzhou, Jiangsu, China, 215129, www.csisolar.com, support@csisolar.com