Preliminary Technical Information Sheet



# HiKuBlack Mono PERC 380 W ~ 410 W

## CS3N-380 | 385 | 390 | 395 | 400 | 405 | 410MS

## **MORE POWER**



Module power up to 410 W Module efficiency up to 20.2 %

Lower LCOE & BOS cost

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

+

Better shading tolerance

## **MORE RELIABLE**



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Minimizes micro-crack impacts

Heavy snow load up to 7000 Pa, enhanced wind load up to 5400 Pa\*





Industry Leading Product Warranty on Materials and Workmanship\*



Linear Power Performance Warranty\*

## 1<sup>st</sup> year power degradation no more than 2% Subsequent annual power degradation no more than 0.55%

\*Subject to the terms and conditions contained in the applicable Canadian Solar Limited Warranty Statement. Also this 25-year limited product warranty is available only for products installed and operating on residential rooftops in certain regions.

## 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\***

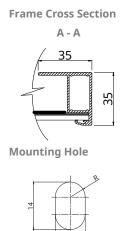
\* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates 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 59 GW deployed around the world since 2001.

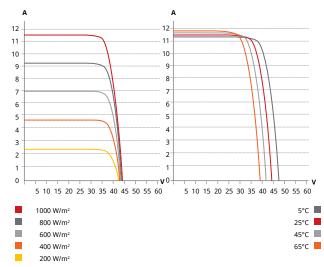
\* Pending testing confirmation. For detailed information, please refer to the Installation Manual.

## **ENGINEERING DRAWING (mm)**

## **Rear View** 180 8 <u>6-Ф5</u> Groun dina 8-14x9 Mounting Hole 940 1300 1155 3 35 1048



### CS3N-400MS / I-V CURVES



## **ELECTRICAL DATA | STC\***

CS3N	380MS	385MS	390MS	395MS	400MS	405MS	410MS
Nominal Max. Power (Pmax)	380 W	385 W	390 W	395 W	400 W	405 W	410 W
Opt. Operating Voltage (Vmp)	36.4 V	36.6 V	36.8 V	37.0 V	37.2 V	37.4 V	37.6 V
Opt. Operating Current (Imp)	10.44 A	10.52 A	10.60 A	10.68 A	10.76 A	A 10.83 A	10.92 A
Open Circuit Voltage (Voc)	43.7 V	43.9 V	44.1 V	44.3 V	44.5 V	44.7 V	44.9 V
Short Circuit Current (Isc)	11.26 A	11.32 A	11.38 A	11.44 A	11.50 A	A11.56 A	11.62 A
Module Efficiency	18.7%	18.9%	19.2%	19.4%	19.7%	19.9%	20.2%
Operating Temperature	-40°C ~	+85°C					
Max. System Voltage	1000V (	(UL)					
Module Fire Performance	TYPE 2	(UL 617	30 1000	)V)			
Max. Series Fuse Rating	20 A						
Application Classification	Class A						
Power Tolerance	0~+10	) W					
* Under Standard Test Conditions (STC)	of irradia	nce of 100	0 W/m <sup>2</sup> . sr	ectrum Al	V 1.5 and	cell tempe	rature of

cell ten 25°C.

## **ELECTRICAL DATA | NMOT\***

CS3N	380MS	385MS	390MS	395MS	400MS	405MS	410MS
Nominal Max. Power (Pmax)	284 W	288 W	291 W	295 W	299 W	303 W	306 W
Opt. Operating Voltage (Vmp)	) 34.0 V	34.2 V	34.4 V	34.6 V	34.7 V	34.9 V	35.1 V
Opt. Operating Current (Imp)	8.35 A	8.42 A	8.48 A	8.54 A	8.60 A	8.66 A	8.73 A
Open Circuit Voltage (Voc)	41.2 V	41.4 V	41.6 V	41.8 V	41.9 V	42.1 V	42.3 V
Short Circuit Current (Isc)	9.08 A	9.13 A	9.18 A	9.23 A	9.28 A	9.33 A	9.37 A
* Under Nominal Module Operating Te	mperature	(NMOT), i	rradiance	of 800 W/r	m <sup>2,</sup> spectru	IM AM 1.5	ambient

temperature 20°C, wind speed 1 m/s.

\* 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.

## **MECHANICAL DATA**

5	Specification	Data
_	Cell Type	Mono-crystalline
_	Cell Arrangement	132 [2 X (11 X 6) ]
4	Dimensions	1940 X 1048 X 35 mm
		(76.4 X 41.3 X 1.38 in)
Δ	Weight	23.4 kg (51.6 lbs)
4	Front Cover	3.2 mm tempered glass
_	Frame	Anodized aluminium alloy
_	J-Box	IP68, 3 bypass diodes
_	Cable	12 AWG (UL)
_	Cable Length (Including Connector)	Portrait: 400 mm (15.7 in) (+) / 280 mm (11.0 in) (-) (supply additional cable jumper: 2 lines/pallet); land- scape: 1250 mm (49.2 in)*
_	Connector	T4 series or MC4
	Per Pallet	30 pieces
	Per Container (40' HO)	720 pieces

Per Container (40' HQ) 720 pieces

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

## **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 Temperati	ure 42 ± 3°C

#### **PARTNER SECTION**