



# **HiKu Mono PERC**

400 W ~ 425 W CS3N-400 | 405 | 410 | 415 | 420 | 425MS

#### **MORE POWER**



Module power up to 425 W Module efficiency up to 20.9 %



Lower LCOE & BOS cost



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



Better shading tolerance

#### **MORE RELIABLE**



Minimizes micro-crack impacts



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



\*Black frame product can be provided upon request.



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 0.55%

\*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 / UKCA FSEC (US Florida) UL 61730 / IEC 61701 / IEC 62716 UNI 9177 Reaction to Fire: Class 1 / Take-e-way















 $<sup>\</sup>boldsymbol{\star}$  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.

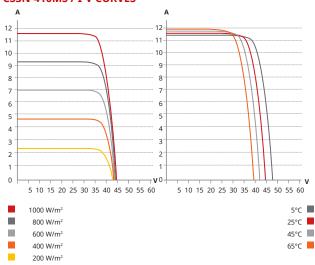
CSI Solar Co., Ltd. is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading PV project developer and manufacturer of solar modules, with over 63 GW deployed around the world since 2001.

<sup>\*</sup> For detailed information, please refer to the Installation Manual.

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

# **Rear View Frame Cross Section** 180 **B** - **B** 1300 1940 1155 **Mounting Hole**

#### CS3N-410MS / I-V CURVES



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

CS3N	400MS	405MS	410MS	415MS	420MS	425MS
Nominal Max. Power (Pmax)	400 W	405 W	410 W	415 W	420 W	425 W
Opt. Operating Voltage (Vmp)	37.2 V	37.4 V	37.6 V	37.8 V	38.0 V	38.2 V
Opt. Operating Current (Imp)	10.76 A	10.83 A	10.92 A	10.98 A	11.06 A	11.13 A
Open Circuit Voltage (Voc)	44.5 V	44.7 V	44.9 V	45.1 V	45.3 V	45.5 V
Short Circuit Current (Isc)	11.50 A	11.56 A	11.62 A	11.68 A	11.74 A	11.80 A
Module Efficiency	19.7%	19.9%	20.2%	20.4%	20.7%	20.9%
Operating Temperature	-40°C ~	+85°C				
Max. System Voltage	1500V (	IEC/UL)	or 1000\	/ (IEC/UI	L)	
Module Fire Performance		(UL 6173 or CLAS			E 2 (UL (	51730
Max. Series Fuse Rating	20 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10	W				

<sup>\*</sup> Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

# **MECHANICAL DATA**

Specification	Data		
Cell Type	Mono-crystalline		
Cell Arrangement	132 [2 X (11 X 6) ]		
Dimensions	1940 X 1048 X 35 mm		
	(76.4 X 41.3 X 1.38 in)		
Weight	22.5 kg (49.6 lbs)		
Front Cover	3.2 mm tempered glass		
Frame	Anodized aluminium alloy		
J-Box	IP68, 3 bypass diodes		
Cable	4 mm <sup>2</sup> (IEC), 12 AWG (UL)		
Cable Length (Including Connector)	Portrait: 400 mm (15.7 in) (+) / 280 mm (11.0 in) (-) ; landscape: 1250 mm (49.2 in)*		
Connector	T4 series, MC4 or MC4-EVO2		
Per Pallet	30 pieces		
Per Container (40' HQ)	720 pieces		
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<sup>\*</sup> For detailed information, please contact your local Canadian Solar sales and technical representatives.

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

CS3N	400MS	405MS	410MS	415MS	420MS	425MS
Nominal Max. Power (Pmax)	300 W	304 W	308 W	311 W	315 W	319 W
Opt. Operating Voltage (Vmp)	34.9 V	35.1 V	35.2 V	35.4 V	35.6 V	35.8 V
Opt. Operating Current (Imp)	8.60 A	8.66 A	8.73 A	8.78 A	8.84 A	8.90 A
Open Circuit Voltage (Voc)	42.1 V	42.3 V	42.4 V	42.6 V	42.8 V	43.0 V
Short Circuit Current (Isc)	9.27 A	9.32 A	9.37 A	9.42 A	9.47 A	9.51 A

<sup>\*</sup> 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.

#### **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

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## **PARTNER SECTION**

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.

CSI Solar Co., Ltd.

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.

 $<sup>\</sup>hbox{$^*$ The specifications and key features contained in this datasheet may deviate slightly from our actual}\\$