



# HiKu

**SUPER HIGH POWER MONO PERC MODULE 425 W ~ 450 W CS3W-425|430|435|440|445|450MS** 

#### **MORE POWER**



26 % more power than conventional modules



Up to 4.5 % lower LCOE Up to 2.7 % lower system cost



Low NMOT:  $42 \pm 3$  °C Low temperature coefficient (Pmax): -0.36 % / °C



Better shading tolerance

### **MORE RELIABLE**



Lower internal current, lower hot spot temperature



Cell crack risk limited in small region, enhance the module reliability



Heavy snow load up to 5400 Pa, wind load up to 3600 Pa\*



linear power output warranty\*



enhanced product warranty on materials and workmanship\*

 $\hbox{*According to the applicable Canadian Solar Limited Warranty Statement.}\\$ 

#### MANAGEMENT SYSTEM CERTIFICATES\*

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

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## **PRODUCT CERTIFICATES\***

IEC 61215 / IEC 61730: VDE / CE UL 1703: CSA / Take-e-way









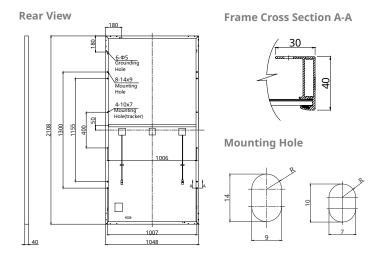


\* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

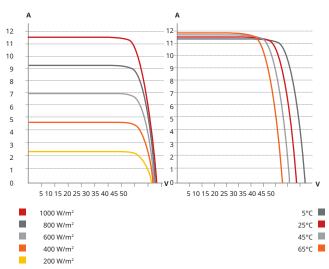
CANADIAN SOLAR (USA), INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 36 GW deployed around the world since 2001.

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

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



#### CS3W-435MS / I-V CURVES



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

425MS	430MS	435MS	440MS	445MS	450MS	
425 W	430 W	435 W	440 W	445 W	450 W	
39.5 V	39.7 V	39.9 V	40.1 V	40.3 V	40.5 V	
10.76 A	10.84 A	10.91 A	10.98 A	11.05 A	11.12 A	
47.7 V	47.9 V	48.1 V	48.3 V	48.5 V	48.7 V	
11.37 A	11.42 A	11.47 A	11.53 A	11.59 A	11.65 A	
19.24%	19.46%	19.69%	19.92%	20.14%	20.37%	
-40°C ~	+85°C					
1500V (	IEC/UL)	or 1000	V (IEC/U	L)		
TYPE 1 (UL 1703) or						
CLASS C (IEC 61730)						
20 A						
Class A						
0 ~ + 5	W					
	425 W 39.5 V 10.76 A 47.7 V 11.37 A 19.24% -40°C ~ 1500V ( TYPE 1 CLASS O 20 A Class A	425 W 430 W 39.5 V 39.7 V 10.76 A 10.84 A 47.7 V 47.9 V 11.37 A 11.42 A 19.24% 19.46% -40°C ~ +85°C 1500V (IEC/UL) TYPE 1 (UL 1703 CLASS C (IEC 61 20 A	425 W 430 W 435 W 39.5 V 39.7 V 39.9 V 10.76 A 10.84 A 10.91 A 47.7 V 47.9 V 48.1 V 11.37 A 11.42 A 11.47 A 19.24% 19.46% 19.69% -40°C ~ +85°C 1500V (IEC/UL) or 1000° TYPE 1 (UL 1703) or CLASS C (IEC 61730) 20 A Class A	425 W 430 W 435 W 440 W 39.5 V 39.7 V 39.9 V 40.1 V 10.76 A 10.84 A 10.91 A 10.98 A 47.7 V 47.9 V 48.1 V 48.3 V 11.37 A 11.42 A 11.47 A 11.53 A 19.24% 19.46% 19.69% 19.92% -40°C ~ +85°C 1500V (IEC/UL) or 1000V (IEC/U TYPE 1 (UL 1703) or CLASS C (IEC 61730) 20 A Class A	10.76 A 10.84 A 10.91 A 10.98 A 11.05 A 47.7 V 47.9 V 48.1 V 48.3 V 48.5 V 11.37 A 11.42 A 11.47 A 11.53 A 11.59 A 19.24% 19.46% 19.69% 19.92% 20.14% -40°C ~ +85°C 1500V (IEC/UL) or 1000V (IEC/UL) TYPE 1 (UL 1703) or CLASS C (IEC 61730) 20 A Class A	

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

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

CS3W	425MS	430MS	435MS	440MS	445MS	450MS
Nominal Max. Power (Pmax)	316 W	320 W	324 W	328 W	331 W	335 W
Opt. Operating Voltage (Vmp)	36.8 V	36.9 V	37.1 V	37.3 V	37.5 V	37.7 V
Opt. Operating Current (Imp)	8.60 A	8.67 A	8.73 A	8.79 A	8.84 A	8.89 A
Open Circuit Voltage (Voc)	44.7 V	44.9 V	45.1 V	45.3 V	45.5 V	45.6 V
Short Circuit Current (Isc)	9.17 A	9.21 A	9.25 A	9.30 A	9.35 A	9.40 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.

#### **MECHANICAL DATA**

Specification	Data	
Cell Type	Mono-crystalline	
Cell Arrangement	144 [2 X (12 X 6) ]	
Dimensions	2108 X 1048 X 40 mm	
Dimensions	(83.0 X41.3 X1.57 in)	
Weight	24.9 kg (54.9 lbs)	
Front Cover	3.2 mm tempered glass	
Frame	Anodized aluminium alloy,	
rrame	crossbar enhanced	
J-Box	IP68, 3 bypass diodes	
Cable	4 mm <sup>2</sup> (IEC), 12 AWG (UL)	

Cable Length (Including Connector) 1670 mm (65.7 in)

Connector	T4 series
Per Pallet	27 pieces
Per Container (40' HQ)	594 pieces

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

# **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.36 % / °C
Temperature Coefficient (Voc)	-0.29 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

## **PARTNER SECTION**

professional skills and please carefully read the safety and installation instructions before using our PV

 $<sup>\</sup>star$  The specifications and key features contained in this datasheet may deviate slightly from our actual  $products\ due\ to\ the\ on\ -going\ innovation\ and\ product\ enhancement.\ Canadian\ Solar\ Inc.\ reserves\ the$ 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