



# HiDM-Black

**ALL-BLACK HIGH DENSITY MONO PERC MODULE**

**320 W ~ 330 W**

**CS1H-320 | 325 | 330MS**

### MORE POWER



Maximize the light absorption area, module efficiency up to 19.57 %



Low NMOT:  $43 \pm 3$  °C  
Low temperature coefficient (Pmax):  $-0.37$  % / °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 2400 Pa



**linear power output warranty**



**product warranty on materials and workmanship**

### 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

### PRODUCT CERTIFICATES\*

IEC 61215 / IEC 61730: VDE / CE / CEC AU  
IEC61701 ED2: VDE / IEC62716: VDE  
UL 1703: CSA  
Take-e-way



\* We can provide this product with special BOM specifically certified with salt mist, and ammonia tests. Please talk to our local technical sales representatives to get your customized solutions.

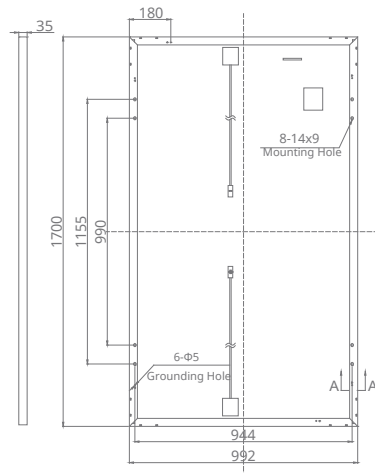
**CANADIAN SOLAR INC.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance/price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 30 GW deployed around the world since 2001.

### CANADIAN SOLAR INC.

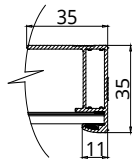
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## ENGINEERING DRAWING (mm)

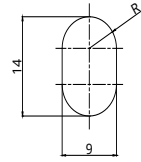
### Rear View



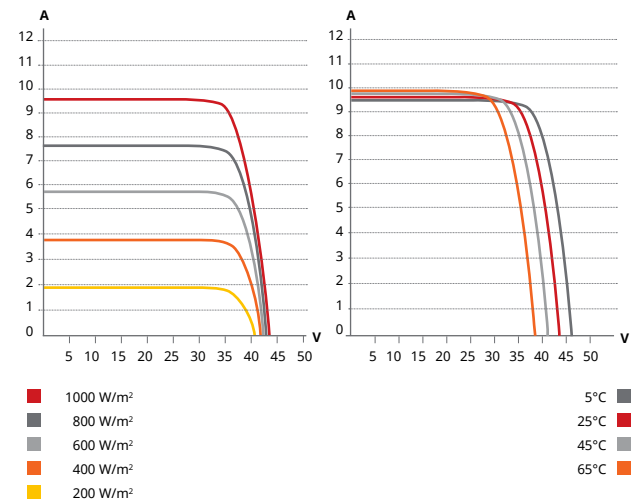
### Frame Cross Section A-A



### Mounting Hole



## CS1H-330MS / I-V CURVES



## ELECTRICAL DATA | STC\*

CS1H	320MS	325MS	330MS
Nominal Max. Power (P <sub>max</sub> )	320 W	325 W	330 W
Opt. Operating Voltage (V <sub>mp</sub> )	35.6 V	35.8 V	36.0 V
Opt. Operating Current (I <sub>mp</sub> )	9.00 A	9.09 A	9.18 A
Open Circuit Voltage (V <sub>oc</sub> )	43.3 V	43.4 V	43.5 V
Short Circuit Current (I <sub>sc</sub> )	9.51 A	9.58 A	9.65 A
Module Efficiency	18.98%	19.27%	19.57%
Operating Temperature	-40°C ~ +85°C		
Max. System Voltage	1000 V (IEC) or 1000 V (UL)		
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)		
Max. Series Fuse Rating	20 A		
Application Classification	Class A		
Power Tolerance	0 ~ + 5 W		

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

## MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Dimensions	1700 × 992 × 35 mm (66.9 × 39.1 × 1.38 in)
Weight	19.2 kg (42.3 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy
J-Box	IP67, 3 bypass diodes
Cable	4.0 mm <sup>2</sup> (IEC), 12 AWG (UL)
Cable Length	Landscape: 740 mm (29.1 in), portrait: 1350 mm (53.1 in) *
Connector	T4 series
Per Pallet	30 pieces
Per Container (40' HQ)	780 pieces

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

## ELECTRICAL DATA | NMOT\*

CS1H	320MS	325MS	330MS
Nominal Max. Power (P <sub>max</sub> )	238 W	242 W	245 W
Opt. Operating Voltage (V <sub>mp</sub> )	32.5 V	32.7 V	32.8 V
Opt. Operating Current (I <sub>mp</sub> )	7.32 A	7.39 A	7.47 A
Open Circuit Voltage (V <sub>oc</sub> )	40.6 V	40.7 V	40.8 V
Short Circuit Current (I <sub>sc</sub> )	7.67 A	7.73 A	7.79 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.

## TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (P <sub>max</sub> )	-0.37 % / °C
Temperature Coefficient (V <sub>oc</sub> )	-0.29 % / °C
Temperature Coefficient (I <sub>sc</sub> )	0.05 % / °C
Nominal Module Operating Temperature	43±3 °C

## PARTNER SECTION



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.

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