

# HiHero

HIGH EFFICIENCY HETEROJUNCTION CELL TECHNOLOGY 415 W ~ 440 W

CS6R-415 | 420 | 425 | 430 | 435 | 440H-AG (IEC1000 V) CS6R-415 | 420 | 425 | 430 | 435 | 440H-AG (IEC1500 V)



#### **MORE POWER**



Module efficiency up to 22.5%, maximize the use of rooftop space



No B-O LID, excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield



Leading temperature coefficient (Pmax): -0.26%/°C, increases energy yield in hot climate



Better shading tolerance



Industry Leading Product Warranty on Materials and Workmanship\*



**Linear Power Performance Warranty\*** 

1st year power degradation no more than 1% Subsequent annual power degradation no more than 0.35%

\*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

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#### **PRODUCT CERTIFICATES\***

## **MORE RELIABLE**



Minimizes micro-crack impacts



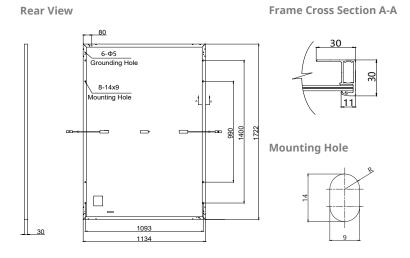
Heavy snow load up to 5400 Pa, enhanced wind load up to 2400 Pa\*

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 20 years, it has successfully delivered over 67 GW of premium-quality solar modules across the world.

<sup>\*</sup> 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.

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

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



#### CS6R-425H-AG / I-V CURVES 14 13 13 12 12 11 11 0 5 10 15 20 25 30 35 40 45 50 55 60 5 10 15 20 25 30 35 40 45 50 55 60 1000 W/m<sup>2</sup> 5°C ■ 800 W/m<sup>2</sup> 25°C 600 W/m<sup>2</sup> 45°C ■

65°C

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

CS6R	415H- AG	420H- AG	425H- AG	430H- AG	435H- AG	440H- AG
Nominal Max. Power (Pmax)	415 W	420 W	425 W	430 W	435 W	440 W
Opt. Operating Voltage (Vmp)	33.6 V	33.7 V	33.7 V	33.8 V	33.8 V	33.9 V
Opt. Operating Current (Imp)	12.34 A	12.48 A	12.62 A	12.76 A	12.89 A	13.02 A
Open Circuit Voltage (Voc)	40.0 V	40.1 V	40.1 V	40.1 V	40.2 V	40.2 V
Short Circuit Current (Isc)	13.23 A	13.28 A	13.33 A	13.38 A	13.43 A	13.48 A
Module Efficiency	21.3%	21.5%	21.8%	22.0%	22.3%	22.5%
Operating Temperature	-40°C ~	+85°C				
Max. System Voltage	1500V (	IEC) or 1	000V (IE	C)		
Module Fire Performance	CLASS C	(IEC617	730)			
Max. Series Fuse Rating	25 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 5 \	N				

<sup>\*</sup> Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax).

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

CS6R	415H- AG	420H- AG	425H- AG	430H- AG	435H- AG	440H- AG
Nominal Max. Power (Pmax)	317 W	321 W	325 W	329 W	332 W	336 W
Opt. Operating Voltage (Vmp)	32.2 V	32.3 V	32.3 V	32.3 V	32.4 V	32.4 V
Opt. Operating Current (Imp)	9.85 A	9.95 A	10.06 A	10.17 A	10.27 A	10.37 A
Open Circuit Voltage (Voc)	38.1 V	38.1 V	38.1 V	38.2 V	38.2 V	38.3 V
Short Circuit Current (Isc)	10.66 A	10.70 A	10.74 A	10.78 A	10.82 A	10.86 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**

400 W/m<sup>2</sup>

200 W/m<sup>2</sup>

Specification	Data
Cell Type	HJT cells
Cell Arrangement	108 [2 X (9 X 6) ]
Dimensions	1722 X 1134 X 30 mm
	(67.8 X 44.6 X 1.18 in)
Weight	23.0 kg (50.7 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	1.6 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm <sup>2</sup> (IEC)
Cable Length (Including Connector)	Portrait: 410 mm (16.1 in) (+) / 290 mm (11.4 in) (-); landscape: 1100 mm (43.3 in)*
Connector	PV-KST4-EVO2/XY, PV-KBT4-EVO2/XY (IEC 1500 V)
Per Pallet	35 pieces
Per Container (40' HQ)	910 pieces

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

#### **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.26 % / °C
Temperature Coefficient (Voc)	-0.24 % / °C
Temperature Coefficient (Isc)	0.04 % / °C
Nominal Module Operating Temperatur	e 41 ± 3°C

#### **PARTNER SECTION**

<sup>\*</sup> 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.