Preliminary Technical Information Sheet



# HiKu6 Mini Mono PERC 395 W ~ 420 W CS6R-395 400 405 410 415 420MS

# **MORE POWER**



Better shading tolerance

Module power up to 420 W

Lower LCOE & system cost

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

Module efficiency up to 21.5%

## MORE RELIABLE



Minimizes micro-crack impacts

Heavy snow load up to 5400 Pa, wind load up to 2400 Pa\* 25 Years

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.

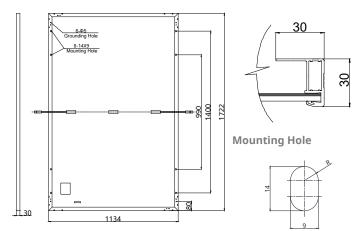
**CSI Solar Co., Ltd.** is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading PV project developer and manufacturer of solar modules, with over 59 GW deployed around the world since 2001.

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

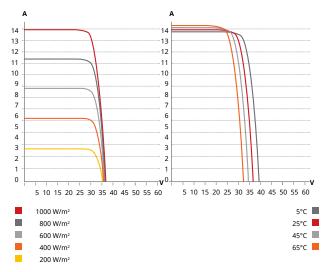
#### **ENGINEERING DRAWING (mm)**

### **Rear View**

# **Frame Cross Section A-A**



#### CS6R-405MS / I-V CURVES



# **ELECTRICAL DATA | STC\***

## **MECHANICAL DATA**

| CS6R  | 395MS      | 400MS     | 405MS    | 410MS   | 415MS        | 420MS                                | Specification                         | Data  |  |
|---|------------|-----------|----------|---------|--------------|--------------------------------------|---------------------------------------|---|--|
| Nominal Max. Power (Pmax)   | 395 W      | 400 W     | 405 W    | 410 W   | 415 W        | 420 W                                | Cell Type                             | Mono-crystalline  |  |
| Opt. Operating Voltage (Vmp   | )30.6 V    | 30.8 V    | 31.0 V   | 31.2 V  | 31.4 V       | 31.6 V                               | Cell Arrangement                      | 108 [2 X (9 X 6) ]  |  |
| Opt. Operating Current (Imp)  | 12.91 A    | 12.99 A   | 13.07 A  | 13.15 A | 13.23 A      | 13.31 A                              | Dimensions                            | 1722 × 1134 × 30 mm   |  |
| Open Circuit Voltage (Voc)  | 36.6 V     | 36.8 V    | 37.0 V   | 37.2 V  | 37.4 V       | 37.6 V                               | Dimensions                            | (67.8 × 44.6 × 1.18 in)   |  |
| Short Circuit Current (Isc)   | 13.77 A    | 13.85 A   | 13.93 A  | 14.01 A | 14.09 A      | 14.17 A                              | Weight                                | 21.3 kg (47.0 lbs)  |  |
| Module Efficiency   | 20.2%      | 20.5%     | 20.7%    | 21.0%   | 21.3%        | 21.5%                                | Front Cover                           | 3.2 mm tempered glass   |  |
| Operating Temperature   | -40°C ~    | +85°C     |          |         |              |                                      | Frame                                 | Anodized aluminium alloy,   |  |
| Max. System Voltage   | 1500V (    | IEC) or 1 | 000V (II | EC)     |              |                                      | J-Box                                 | IP68, 3 bypass diodes   |  |
| Module Fire Performance   | CLASS (    | C (IEC 61 | 730)     |         |              |                                      | Cable                                 | 4 mm² (IEC)   |  |
| Max. Series Fuse Rating   | 25 A       |           |          |         |              |                                      | Connector                             | T4 series or MC4-EVO2   |  |
| Application Classification  | Class A    |           |          |         | Cabla Langth | Portrait: 410 mm (16.1 in) (+) / 290 |                                       |   |  |
| Power Tolerance   | 0 ~ + 10 W |           |          |         |              |                                      | Cable Length<br>(Including Connector) | mm (11.4 in) (-) (supply additional jumper cable: 2 lines / Pallet) ; land- |  |
| * Under Standard Test Conditions (STC) of irradiance of 1000 W/m <sup>2</sup> , spectrum AM 1.5 and cell tempe- |            |           |          |         |              | scape: 1100 mm (43.3 in)*            |                                       |   |  |

rature of 25°C.

| Dimensions                            | 1/22 * 1134 * 30 mm   |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| Dimensions                            | (67.8 × 44.6 × 1.18 in)   |  |  |  |  |
| Weight                                | 21.3 kg (47.0 lbs)  |  |  |  |  |
| Front Cover                           | 3.2 mm tempered glass   |  |  |  |  |
| Frame                                 | Anodized aluminium alloy,   |  |  |  |  |
| J-Box                                 | IP68, 3 bypass diodes   |  |  |  |  |
| Cable                                 | 4 mm² (IEC)   |  |  |  |  |
| Connector                             | T4 series or MC4-EVO2   |  |  |  |  |
| Cable Length<br>(Including Connector) | Portrait: 410 mm (16.1 in) (+) / 290<br>mm (11.4 in) (-) (supply additional<br>jumper cable: 2 lines / Pallet) ; land-<br>scape: 1100 mm (43.3 in)* |  |  |  |  |
| Per Pallet                            | 36 pieces   |  |  |  |  |
| Per Container (40' HQ) 936 pieces     |   |  |  |  |  |

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

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

| CS6R                                | 395MS     | 400MS     | 405MS      | 410MS     | 415MS       | 420MS   |
|-------------------------------------|-----------|-----------|------------|-----------|-------------|---------|
| Nominal Max. Power (Pmax)           | 296 W     | 300 W     | 304 W      | 307 W     | 311 W       | 315 W   |
| Opt. Operating Voltage (Vmp)        | )28.7 V   | 28.9 V    | 29.1 V     | 29.2 V    | 29.4 V      | 29.6 V  |
| Opt. Operating Current (Imp)        | 10.33 A   | 10.39 A   | 10.45 A    | 10.52 A   | 10.58 A     | 10.65 A |
| Open Circuit Voltage (Voc)          | 34.6 V    | 34.8 V    | 35.0 V     | 35.1 V    | 35.3 V      | 35.5 V  |
| Short Circuit Current (Isc)         | 11.09 A   | 11.15 A   | 11.21 A    | 11.28 A   | 11.34 A     | 11.41 A |
| * Under Nominal Module Operating Te | mperature | (NMOT) ir | radiance o | f 800 W/m | 2, spectrum | AM 1 5  |

erature (NMOT), irradiance of 800 W/m<sup>2,</sup> spectrum AM 1.5, er Nominal Mod erating Tem ambient temperature 20°C, wind speed 1 m/s.

## **TEMPERATURE CHARACTERISTICS**

| _        | Specification                        | Data         |
|----------|--------------------------------------|--------------|
| 4        | Temperature Coefficient (Pmax)       | -0.34 % / °C |
|          | Temperature Coefficient (Voc)        | -0.26 % / °C |
| Δ        | Temperature Coefficient (Isc)        | 0.05 % / °C  |
| <u>`</u> | Nominal Module Operating Temperature | 41 ± 3°C     |
|          |                                      |              |

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#### **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. 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 gualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.