



Preliminary Technical
Information Sheet



KUPOWER (1500 V) CS3K-300 | 305 | 310MS

With Canadian Solar's industry-pioneering mono-PERC cell technology and the innovative LIC (Low Internal Current) module technology, we will soon offer our global customers the high power 60-cell mono-PERC modules.

- The mono-PERC KuPower modules can reach up to 310 W with the unique 2 "HIGH" and 4 "LOW" features:
- **Higher power classes for equivalent module sizes**
 - **Module efficiency up to 18.66 %**
 - **LOW LID (light-induced degradation): avg. 1.1 %**
 - LOW hot spot temperature, enhancing system reliability
 - LOW temperature coefficient (Pmax): -0.37 % / °C
 - LOW NMOT (Nominal Module Operating Temperature): 42 ± 2 °C



More power output thanks to
low NMOT: 42 ± 2 °C



Low LID (light-induced
degradation): avg. 1.1 %



Low power loss in cell
connection



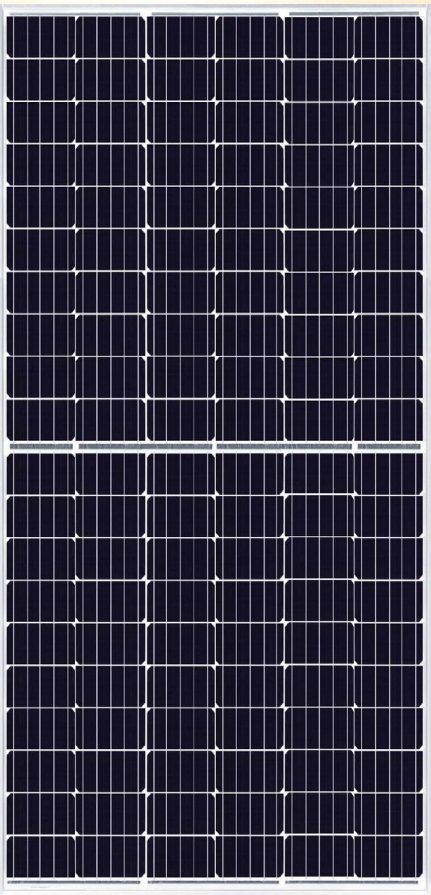
Safer: lower hot spot
temperature



Low BoS costs with
1500 V_{dc} system voltage



Heavy snow load up to 5400 Pa,
wind load up to 2400 Pa



25
years

linear power output warranty

10
years

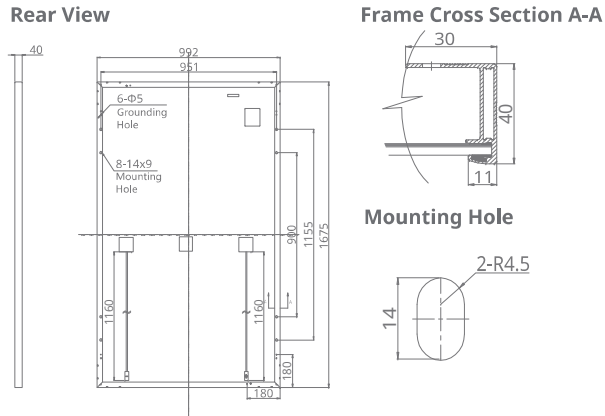
product warranty on materials
and workmanship

PRODUCT CERTIFICATES*

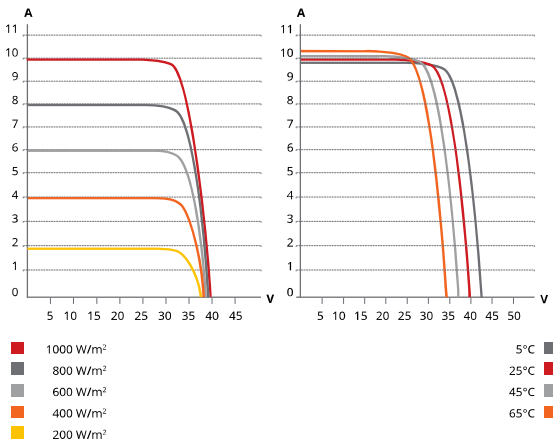
IEC 61215 / IEC 61730: 2005 & 2016: VDE / CE (Expected in middle of June, 2017)

* 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.

ENGINEERING DRAWING (mm)



CS3K-305MS / I-V CURVES



ELECTRICAL DATA | STC*

CS3K	300MS	305MS	310MS
Nominal Max. Power (Pmax)	300 W	305 W	310 W
Opt. Operating Voltage (Vmp)	32.5 V	32.7 V	32.9 V
Opt. Operating Current (Imp)	9.24 A	9.33 A	9.43 A
Open Circuit Voltage (Voc)	39.3 V	39.5 V	39.7 V
Short Circuit Current (Isc)	9.82 A	9.90 A	9.98 A
Module Efficiency	18.05 %	18.36%	18.66%
Operating Temperature	-40°C ~ +85°C		
Max. System Voltage	1500 V (IEC) or 1000 V (UL)		
Max. Series Fuse Rating	15 A		
Application Classification	Class A		
Power Tolerance	0 ~ + 5 W		

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

ELECTRICAL DATA | NMOT*

CS3K	300MS	305MS	310MS
Nominal Max. Power (Pmax)	219 W	222 W	225 W
Opt. Operating Voltage (Vmp)	29.6 V	29.8 V	30.0 V
Opt. Operating Current (Imp)	7.40 A	7.45 A	7.50 A
Open Circuit Voltage (Voc)	36.4 V	36.6 V	36.8 V
Short Circuit Current (Isc)	7.94 A	8.00 A	8.06 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline, half 6 inch cells
Cell Arrangement	120 (20 × 6)
Dimensions	1675 × 992 × 40 mm (65.9 × 39.1 × 1.57 in)
Weight	18.5 kg (40.8 lbs)
Front Cover	3.2 mm tempered glass
Frame Material	Anodized aluminium alloy
J-Box	IP68, 3 diodes
Cable	4.0 mm² & 12 AWG , 1160 mm
Connector	T4 series or UTX or MC4 series
Per Pallet	26 pieces
Per container (40' HQ)	728 pieces

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.37 % / °C
Temperature Coefficient (Voc)	-0.30 % / °C
Temperature Coefficient (Isc)	0.053 % / °C
Nominal Module Operating Temperature	42±2 °C

PARTNER SECTION

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein. This datasheet is written in English with Chinese (or other language) translation for reference only. In case there are inconsistencies or conflicts between the English version and the Chinese version (or other language version) of this datasheet, the English version shall prevail and take control in all respects.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.