



Ku5 Mono PERC

425 W ~ 450 W CS3S-425|430|435|440|445|450MS

MORE POWER



Module power up to 450 W Module efficiency up to 20.8 %



Up to 2.5 % lower LCOE Up to 1.7 % lower system cost



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



Compatible with mainstream trackers, cost effective product for utility power plant



Better shading tolerance

MORE RELIABLE



Minimizes micro-crack impacts



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

12 Years

Enhanced Product Warranty on Materials and Workmanship*



Linear Power Performance Warranty*

1st year power degradation no more than 2% Subsequent annual power degradation no more than 0.55%

*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

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730 / CE / INMETRO IEC 61701 / IEC 62716 / IEC 60068-2-68 UNI 9177 Reaction to Fire: Class 1 / Take-e-way







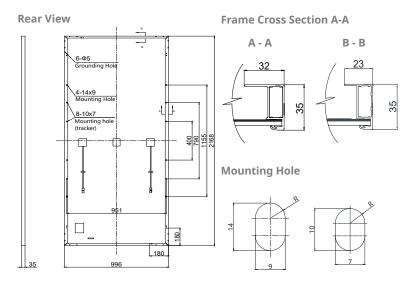


* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

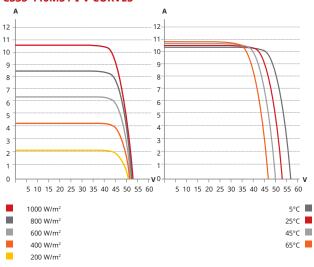
CSI Solar Co., Ltd. is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading PV project developer and manufacturer of solar modules, with over 50 GW deployed around the world since 2001.

^{*} For detailed information, please refer to the Installation Manual.

ENGINEERING DRAWING (mm)



CS3S-440MS / I-V CURVES



ELECTRICAL DATA | STC*

CS3S	425MS	430MS	435MS	440MS	445MS	450MS
Nominal Max. Power (Pmax)	425 W	430 W	435 W	440 W	445 W	450 W
Opt. Operating Voltage (Vmp)	43.9 V	44.1 V	44.3 V	44.5 V	44.7 V	44.9 V
Opt. Operating Current (Imp)	9.69 A	9.76 A	9.82 A	9.89 A	9.96 A	10.03 A
Open Circuit Voltage (Voc)	52.5 V	52.7 V	52.9 V	53.1 V	53.3 V	53.5 V
Short Circuit Current (Isc)	10.34 A	10.40 A	10.46 A	10.52 A	10.58 A	10.64 A
Module Efficiency	19.7%	19.9%	20.1%	20.4%	20.6%	20.8%
Operating Temperature	-40°C ~	+85°C				
Max. System Voltage	1500V (IEC)				
Module Fire Performance	CLASS ((IEC 61	730)			
Max. Series Fuse Rating	20 A					
Application Classification	Class A					
Power Tolerance	0 ~ + 10	W				

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

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Cell Arrangement	156 [2 X (13 X 6)]
Dimensions	2168 X 996 X 35 mm
	(85.4 X 39.2 X 1.38 in)
Weight	23.7 kg (52.2 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy,
J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC)
Cable Length (Including Connector)	400 mm (15.7 in) (+) / 280 mm (11.0 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	30 pieces
Per Container (40' HQ)	600 pieces

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

ELECTRICAL DATA | NMOT*

CS3S	425MS	430MS	435MS	440MS	445MS	450MS
Nominal Max. Power (Pmax)	317 W	321 W	324 W	328 W	332 W	336 W
Opt. Operating Voltage (Vmp)	40.9 V	41.1 V	41.3 V	41.5 V	41.7 V	41.9 V
Opt. Operating Current (Imp)	7.76 A	7.82 A	7.86 A	7.91 A	7.97 A	8.02 A
Open Circuit Voltage (Voc)	49.4 V	49.6 V	49.8 V	50.0 V	50.2 V	50.3 V
Short Circuit Current (Isc)	8.34 A	8.39 A	8.43 A	8.49 A	8.54 A	8.58 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.

TEMPERATURE CHARACTERISTICS

Specification	Data	
Temperature Coefficient (Pmax)	-0.35 % / °C	
Temperature Coefficient (Voc)	-0.27 % / °C	
Temperature Coefficient (Isc)	0.05 % / °C	
Nominal Module Operating Temperature	42 ± 3°C	

PARTNER SECTION

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.

CSI Solar Co., Ltd.

^{*} 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.