



HIGH POWER POLY PERC MODULE **400 W ~ 425 W**CS3W-400|405|410|415|420|425P

MORE POWER



24 % higher power than conventional modules



Up to 4.5 % lower LCOE
Up to 2.7 % lower system cost



Low NMOT: 42 ± 3 °C Low temperature coefficient (Pmax): -0.36 % / °C



Better shading tolerance

MORE RELIABLE



Lower internal current, lower hot spot temperature



Minimizes micro-crack impacts



Heavy snow load up to 5400 Pa, wind load up to 3600 Pa*





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 / MCS / INMETRO CEC listed (US California) / FSEC (US Florida) UL 61730 / IEC 61701 / IEC 62716 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.

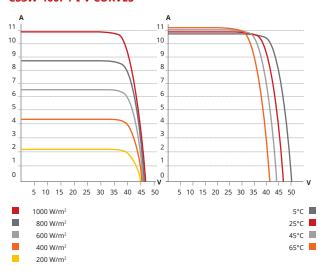
CSI Solar Co., Ltd. is committed to providing high quality solar products, solar system solutions and services to customers around the world. Canadian Solar was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey, and is a leading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

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

ENGINEERING DRAWING (mm)

Rear View Frame Cross Section A-A B-B 8-05 Grounding Hole 4-10x7 Mounting Hole

CS3W-400P / I-V CURVES



ELECTRICAL DATA | STC*

CS3W	400P	405P	410P	415P	420P	425P
Nominal Max. Power (Pmax)	400 W	405 W	410 W	415 W	420 W	425 W
Opt. Operating Voltage (Vmp)	38.7 V	38.9 V	39.1 V	39.3 V	39.5 V	39.7 V
Opt. Operating Current (Imp)	10.34 A	10.42 A	10.49 A	10.56 A	10.64 A	10.71 A
Open Circuit Voltage (Voc)	47.2 V	47.4 V	47.6 V	47.8 V	48.0 V	48.2 V
Short Circuit Current (Isc)	10.90 A	10.98 A	11.06 A	11.14 A	11.26 A	11.29 A
Module Efficiency	18.1%	18.3%	18.6%	18.8%	19.0%	19.2%
Operating Temperature	-40°C ~	+85°C				
Max. System Voltage	1500V (IEC/UL)	or 1000\	/ (IEC/UI	_)	
Module Fire Performance	TYPE 1 (1000V)	(UL 6173 or CLAS	30 1500V S C (IEC (/) or TYP 51730)	E 2 (UL 6	51730
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	Poly-crystalline
Cell Arrangement	144 [2 X (12 X 6)]
Dimensions	2108 X 1048 X 35 mm
	(83.0 X 41.3 X 1.38 in)
Weight	24.3 kg (53.6 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	500 mm (19.7 in) (+) / 350 mm (13.8 in) (-) or customized length*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	30 pieces
Per Container (40' HQ)660 pieces

 $[\]mbox{\ensuremath{^{\star}}}$ For detailed information, please contact your local Canadian Solar sales and technical representatives.

ELECTRICAL DATA | NMOT*

CS3W	400P	405P	410P	415P	420P	425P
Nominal Max. Power (Pmax)	298 W	302 W	305 W	309 W	313 W	317 W
Opt. Operating Voltage (Vmp)	36.0 V	36.2 V	36.4 V	36.6 V	36.8 V	36.9 V
Opt. Operating Current (Imp)	8.27 A	8.33 A	8.39 A	8.45 A	8.51 A	8.57 A
Open Circuit Voltage (Voc)	44.3 V	44.5 V	44.7 V	44.9 V	45.1 V	45.3 V
Short Circuit Current (Isc)	8.79 A	8.86 A	8.92 A	8.99 A	9.08 A	9.11 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)	-0.36 % / °C
Temperature Coefficient (Voc)	-0.28 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	e 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.

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^{*} 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.