





MORE POWER



24 % more 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): -0.37 % / °C



Better shading tolerance

MORE RELIABLE



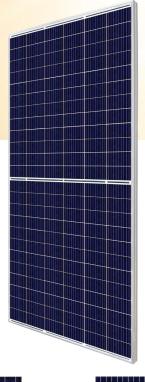
Lower internal current, lower hot spot temperature



Cell crack risk limited in small region, enhance the module reliability



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





5BB cell



MBB cell

* Both 5BB and MBB modules will be supplied.



linear power output warranty



product warranty on materials and workmanship

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001:2015 / Quality management system ISO 14001:2015 / Standards for environmental management system OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE / CE / CEC AU IEC61701 ED2: VDE / IEC62716: VDE UL 1703: CSA Take-e-way







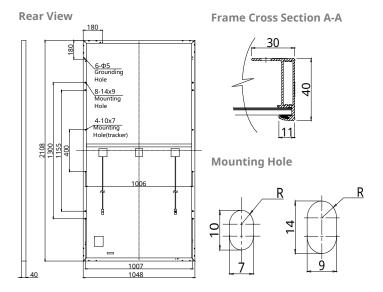




* We can provide this product with special BOM specifically certified with salt mist, and ammonia tests. Please talk to our local techinal sales representatives to get your customized solutions.

CANADIAN SOLAR (USA), INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 30 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

ENGINEERING DRAWING (mm)



ELECTRICAL DATA | STC*

CS3W	395P	400P	405P	410P	415P
Nominal Max. Power (Pmax)	395 W	400 W	405 W	410 W	415 W
Opt. Operating Voltage (Vmp)	38.5 V	38.7 V	38.9 V	39.1 V	39.3 V
Opt. Operating Current (Imp)	10.26 A	10.34 A	10.42 A	10.49 A	10.56 A
Open Circuit Voltage (Voc)	47.0 V	47.2 V	47.4 V	47.6 V	47.8 V
Short Circuit Current (Isc)	10.82 A	10.90 A	10.98 A	11.06 A	11.14 A
Module Efficiency	17.88%	18.11%	18.33%	18.56%	18.79%
Operating Temperature	-40°C ~	+85°C			
Max. System Voltage	1500V ((EC/UL) c	r 1000V	(IEC/UL)	
Module Fire Performance	TYPE 1 (UL 1703	or		
Module File Felloffilance	CLASS C	(IEC 617	730)		
Max. Series Fuse Rating	20 A				
Application Classification	Class A				
Power Tolerance	0~+5\	N			

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

ELECTRICAL DATA | NMOT*

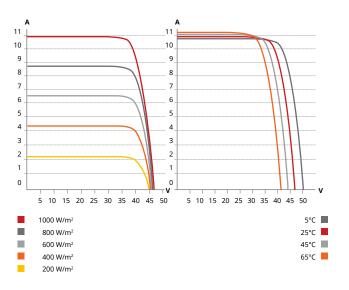
CS3W	395P	400P	405P	410P	415P
Nominal Max. Power (Pmax)	293 W	297 W	301 W	304 W	308 W
Opt. Operating Voltage (Vmp)	35.1 V	35.3 V	35.5 V	35.7 V	35.9 V
Opt. Operating Current (Imp)	8.35 A	8.42 A	8.48 A	8.52 A	8.58 A
Open Circuit Voltage (Voc)	44.0 V	44.2 V	44.4 V	44.6 V	44.8 V
Short Circuit Current (Isc)	8.72 A	8.78 A	8.85 A	8.90 A	8.97 A

^{*} Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m 2 spectrum AM 1.5, ambient temperature 20 $^{\circ}$ C, wind speed 1 m/s.

* 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. Canadian Solar Inc. 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.

CS3W-400P / I-V CURVES



MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline
Cell Arrangement	144 [2 X (12 X 6)]
Dimensions	2108 X 1048 X 40 mm
	(83.0 X 41.3 X 1.57 in)
Weight	24.9 kg (54.9 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy,
	crossbar enhanced
J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	Portrait: 500 mm (19.7 in) (+) / 350 mm (13.8 in) (-); landscape: 1400 mm (55.1 in); leap-frog connection: 1670 mm (65.7 in)*
Connector	T4 series
Per Pallet	27 pieces
Per Container (40' HQ)594 pieces

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

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.37 % / °C
Temperature Coefficient (Voc)	-0.29 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	e 42 ± 3°C

PARTNER SECTION