

TOPHiKu6

N-type TOPCon Technology

435 W ~ 470 W

CS6.2-48TM-435 | 440 | 445 | 450 | 455 | 460 |
465 | 470 (IEC1500V)

MORE POWER



Module power up to 470 W
Module efficiency up to 23.5 %



Excellent anti-LeTID & anti-PID performance.
Low power degradation, high energy yield



Lower temperature coefficient (Pmax): -0.29%/°C,
increases energy yield in hot climate



Lower LCOE & system cost

MORE RELIABLE



Tested up to ice ball of 45 mm diameter
according to IEC 61215 standard



Minimizes micro-crack impacts



Front side test load up to 5400 Pa,
rear side test load up to 2400 Pa*

*Black frame product can be provided upon request.



**Industry Leading Product Warranty on Materials
and Workmanship***



Linear Power Performance Warranty*

**1st year power degradation no more than 1%
Subsequent annual power degradation no more than 0.4%**

*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
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730 / CE / CGC
IEC 61701 / IEC 62716
UNI 9177 Reaction to Fire: Class 1



* 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 photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 24 years, it has successfully delivered over 150 GW of premium-quality solar modules across the world.

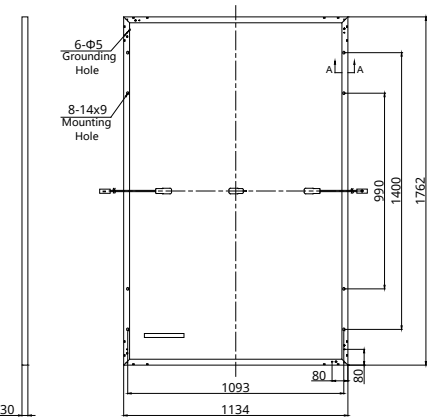
* For detailed information, please refer to the Installation Manual.

Canadian Solar MSS (Australia) Pty Ltd.

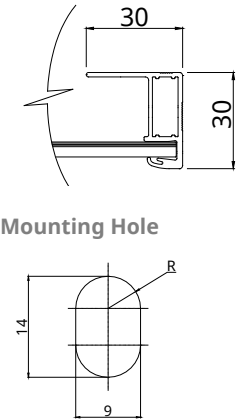
Level 27, 101 Collins Street, Melbourne VIC 3000, Australia, sales.au@csisolar.com, www.csisolar.com/au

ENGINEERING DRAWING (mm)

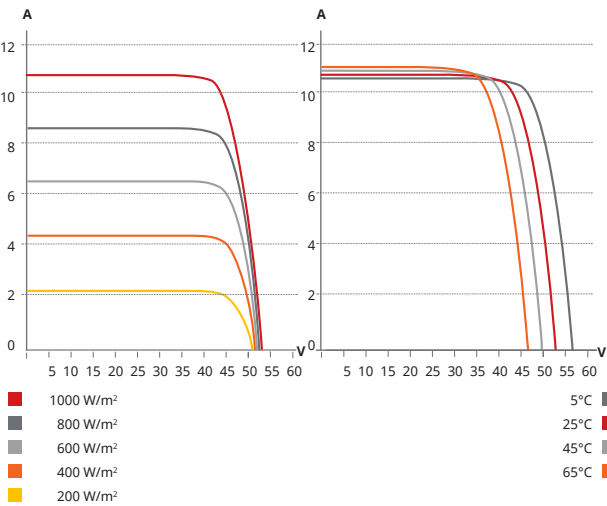
Rear View



Frame Cross Section A-A



CS6.2-48TM-455 / I-V CURVES



ELECTRICAL DATA (STC*) | CS6.2-48TM-xxx (IEC1500V) (xxx=435-460)

	435	440	445	450	455	460
Nominal Max. Power (Pmax)	435 W	440 W	445 W	450 W	455 W	460 W
Opt. Operating Voltage (Vmp)	44.2 V	44.4 V	44.6 V	44.8 V	45.0 V	45.2 V
Opt. Operating Current (Imp)	9.85 A	9.91 A	9.98 A	10.05 A	10.12 A	10.18 A
Open Circuit Voltage (Voc)	52.3 V	52.5 V	52.7 V	52.9 V	53.1 V	53.3 V
Short Circuit Current (Isc)	10.47 A	10.54 A	10.61 A	10.68 A	10.75 A	10.82 A
Module Efficiency	21.8%	22.0%	22.3%	22.5%	22.8%	23.0%
Operating Temperature	-40°C ~ +85°C					
Module (T98)max	70°C					
Max. System Voltage	1500V (IEC/UL)					
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)					
Max. Series Fuse Rating	20 A					
Protection Class	Class II					
Power Tolerance	- 5 W ~ + 10 W					

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C. Measurement uncertainty: ±3 % (Pmax), ±5% (Voc, Isc).

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	144 [2 x (12 x 6)]
Dimensions	1762 x 1134 x 30 mm (69.4 x 44.6 x 1.18 in)
Weight	21.3 kg (47.0 lbs)
Front Glass	3.2 mm tempered glass with anti-reflective coating
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	1250 mm (49.2 in)*
Connector	Tlian: T6 Stäubli: PV-KST4-EVO2A/6I, PV-KBT4-EVO2A/6I
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*) | CS6.2-48TM-xxx (IEC1500V) (xxx=435-460)

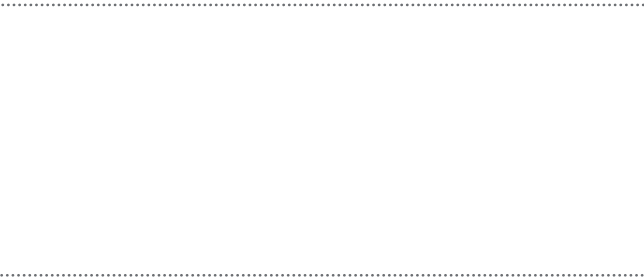
	435	440	445	450	455	460
Nominal Max. Power (Pmax)	329 W	333 W	337 W	340 W	344 W	348 W
Opt. Operating Voltage (Vmp)	41.8 V	42.0 V	42.2 V	42.4 V	42.5 V	42.7 V
Opt. Operating Current (Imp)	7.87 A	7.93 A	7.98 A	8.04 A	8.09 A	8.14 A
Open Circuit Voltage (Voc)	49.5 V	49.7 V	49.9 V	50.1 V	50.3 V	50.5 V
Short Circuit Current (Isc)	8.44 A	8.49 A	8.55 A	8.60 A	8.66 A	8.72 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)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

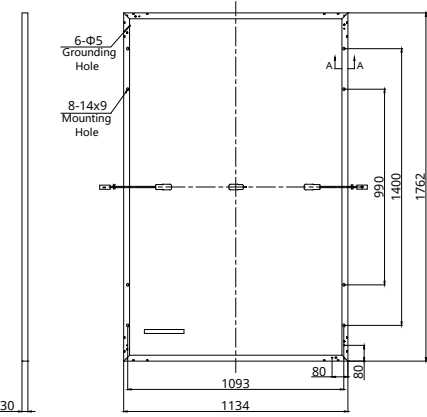
PARTNER SECTION



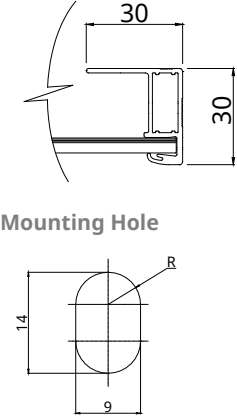
* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice.
Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

ENGINEERING DRAWING (mm)

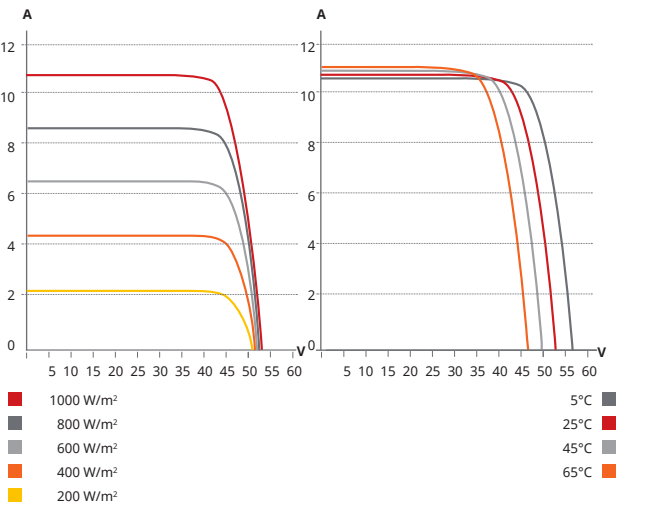
Rear View



Frame Cross Section A-A



CS6.2-48TM-455 / I-V CURVES



ELECTRICAL DATA (STC*) | CS6.2-48TM-xxx (IEC1500V) (xxx=465-470)

	465	470
Nominal Max. Power (Pmax)	465 W	470 W
Opt. Operating Voltage (Vmp)	45.4 V	45.6 V
Opt. Operating Current (Imp)	10.25 A	10.32 A
Open Circuit Voltage (Voc)	53.5 V	53.7 V
Short Circuit Current (Isc)	10.89 A	10.96 A
Module Efficiency	23.3%	23.5%
Operating Temperature	-40°C ~ +85°C	
Module (T98)max	70°C	
Max. System Voltage	1500V (IEC/UL)	
Module Fire Performance	TYPE 1 (UL 61730 1500V) or TYPE 2 (UL 61730 1000V) or CLASS C (IEC 61730)	
Max. Series Fuse Rating	20 A	
Protection Class	Class II	
Power Tolerance	- 5 W ~ + 10 W	

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J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	1250 mm (49.2 in)*
Connector	Tlian: T6 Stäubli: PV-KST4-EVO2A/6I, PV-KBT4-EVO2A/6I
Per Pallet	36 pieces

Per Container (40' HQ) 936 pieces

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ELECTRICAL DATA (NMOT*) | CS6.2-48TM-xxx (IEC1500V) (xxx=465-470)

	465	470
Nominal Max. Power (Pmax)	352 W	356 W
Opt. Operating Voltage (Vmp)	42.9 V	43.1 V
Opt. Operating Current (Imp)	8.20 A	8.25 A
Open Circuit Voltage (Voc)	50.7 V	50.8 V
Short Circuit Current (Isc)	8.77 A	8.83 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)	-0.29 % / °C
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