



TOPCon Gen2 Module

TOPHiKu6

CS6.2-54TD-470 | 475 | 480 | 485 | 490 | 495 | 500 | 505 |
510 | 515 | 520 | 525 | 530 | 535 | 540 | 545 | 550 (IEC1500V)

MORE POWER



Elegant dual-glass design for installations on rooftops, carports, etc



Module power up to 550 W
Module efficiency up to 24.7 %



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 25 mm diameter
according to IEC 61215 standard



Minimizes micro-crack impacts



Downward test load up to +5400 Pa,
Upward test load up to -2400 Pa*

*Black frame product can be provided upon request.



**Enhanced 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
IEC 61701 / IEC 62716
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., a BNEF Tier 1 and S&P Global Tier 1 module manufacturer, is a leading provider of integrated solar and energy storage solutions. With over 25 years of expertise, the company has delivered more than 175 GW of premium-quality solar modules worldwide.

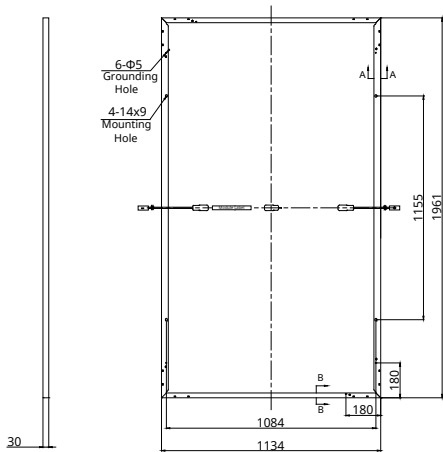
* For detailed information, please refer to the Installation Manual.

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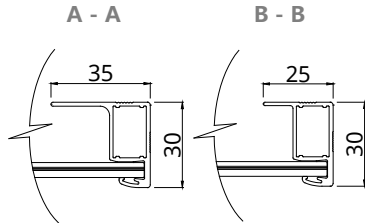
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ENGINEERING DRAWING (mm)

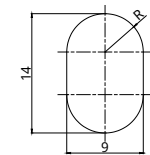
Rear View



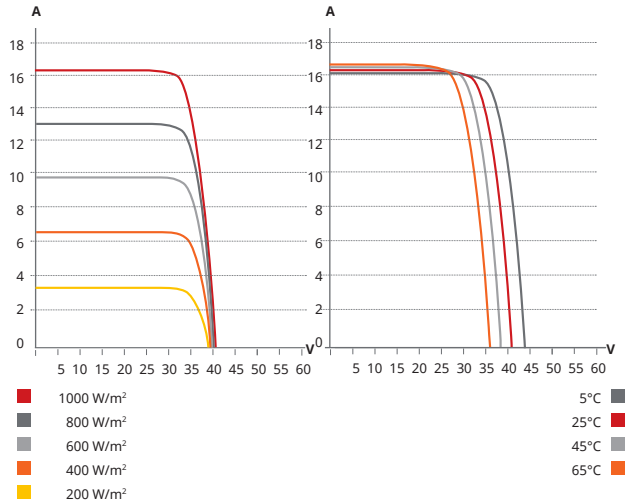
Frame Cross Section



Mounting Hole



CS6.2-54TD-530 (IEC1500V) / I-V CURVES



ELECTRICAL DATA (STC*) | CS6.2-54TD-xxx (IEC1500V) (xxx=470-500)

CS6.2-54TD	470	475	480	485	490	495	500
Nominal Max. Power (Pmax)	470 W	475 W	480 W	485 W	490 W	495 W	500 W
Opt. Operating Voltage (Vmp)	32.2 V	32.4 V	32.6 V	32.8 V	33.0 V	33.2 V	33.4 V
Opt. Operating Current (Imp)	14.60 A	14.67 A	14.73 A	14.79 A	14.85 A	14.91 A	14.98 A
Open Circuit Voltage (Voc)	38.4 V	38.6 V	38.8 V	39.0 V	39.2 V	39.4 V	39.6 V
Short Circuit Current (Isc)	15.61 A	15.67 A	15.74 A	15.80 A	15.86 A	15.91 A	16.00 A
Module Efficiency	21.1%	21.4%	21.6%	21.8%	22.0%	22.3%	22.5%
Operating Temperature	-40°C ~ +85°C						
Module (T98)max	70°C						
Max. System Voltage	1500V (IEC)						
Module Fire Performance	CLASS C (IEC 61730)						
Max. Series Fuse Rating	30 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).

ELECTRICAL DATA (NMOT*) | CS6.2-54TD-xxx (IEC1500V) (xxx=470-500)

CS6.2-54TD	470	475	480	485	490	495	500
Nominal Max. Power (Pmax)	356 W	359 W	363 W	367 W	371 W	374 W	378 W
Opt. Operating Voltage (Vmp)	30.4 V	30.6 V	30.8 V	31.0 V	31.2 V	31.4 V	31.6 V
Opt. Operating Current (Imp)	11.68 A	11.73 A	11.78 A	11.83 A	11.88 A	11.93 A	11.98 A
Open Circuit Voltage (Voc)	36.4 V	36.5 V	36.7 V	36.9 V	37.1 V	37.3 V	37.5 V
Short Circuit Current (Isc)	12.58 A	12.63 A	12.68 A	12.73 A	12.78 A	12.82 A	12.89 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	TOPCon cells
Cell Arrangement	108 [2 x (9 x 6)]
Dimensions	1961 × 1134 × 30 mm (77.2 × 44.6 × 1.18 in)
Weight	23.7 kg (52.2 lbs)
Front Glass	1.6 mm heat strengthened glass with anti-reflective coating
Back Glass	1.6 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	Tlian: T6 Stäubli: PV-KST4-EVO2A/6I, PV-KBT4-EVO2A/6I
Per Pallet	36 pieces
Per Container (40' HQ)	864 pieces

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

TEMPERATURE CHARACTERISTICS

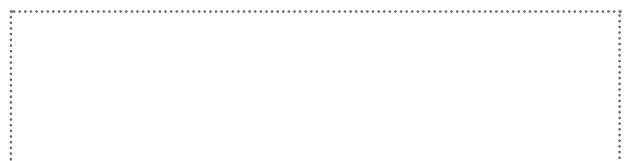
Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

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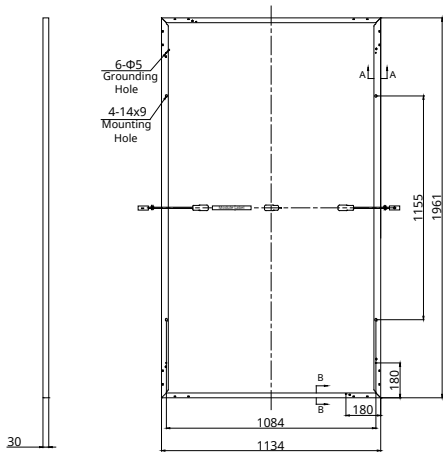
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PARTNER SECTION

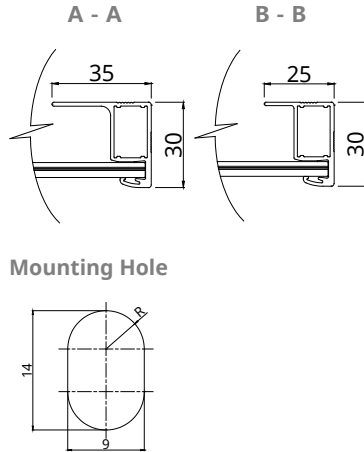


ENGINEERING DRAWING (mm)

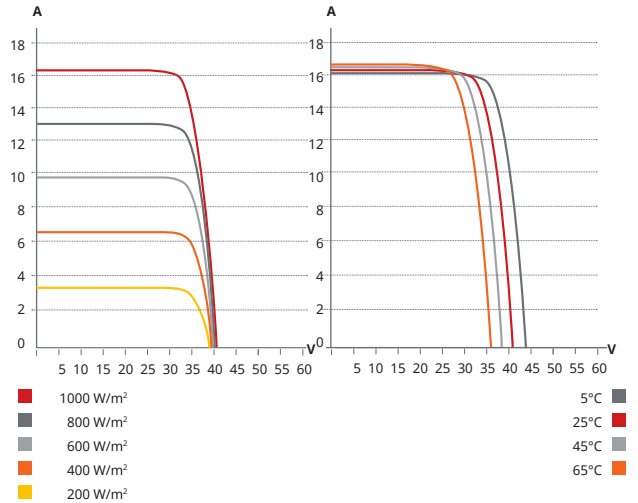
Rear View



Frame Cross Section



CS6.2-54TD-530 (IEC1500V) / I-V CURVES



ELECTRICAL DATA (STC*) | CS6.2-54TD-xxx (IEC1500V) (xxx=505-535)

CS6.2-54TD	505	510	515	520	525	530	535
Nominal Max. Power (Pmax)	505 W	510 W	515 W	520 W	525 W	530 W	535 W
Opt. Operating Voltage (Vmp)	33.6 V	33.8 V	34.0 V	34.2 V	34.4 V	34.6 V	34.8 V
Opt. Operating Current (Imp)	15.04 A	15.10 A	15.16 A	15.22 A	15.28 A	15.34 A	15.40 A
Open Circuit Voltage (Voc)	39.8 V	40.0 V	40.2 V	40.4 V	40.8 V	41.0 V	41.2 V
Short Circuit Current (Isc)	16.05 A	16.10 A	16.15 A	16.20 A	16.25 A	16.30 A	16.35 A
Module Efficiency	22.7%	22.9%	23.2%	23.4%	23.6%	23.8%	24.1%
Operating Temperature	-40°C ~ +85°C						
Module (T98)max	70°C						
Max. System Voltage	1500V (IEC)						
Module Fire Performance	CLASS C (IEC 61730)						
Max. Series Fuse Rating	30 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).

ELECTRICAL DATA (NMOT*) | CS6.2-54TD-xxx (IEC1500V) (xxx=505-535)

CS6.2-54TD	505	510	515	520	525	530	535
Nominal Max. Power (Pmax)	382 W	386 W	390 W	393 W	397 W	401 W	405 W
Opt. Operating Voltage (Vmp)	31.8 V	32.0 V	32.1 V	32.3 V	32.5 V	32.7 V	32.9 V
Opt. Operating Current (Imp)	12.03 A	12.07 A	12.12 A	12.17 A	12.21 A	12.26 A	12.30 A
Open Circuit Voltage (Voc)	37.7 V	37.9 V	38.1 V	38.3 V	38.6 V	38.8 V	39.0 V
Short Circuit Current (Isc)	12.93 A	12.97 A	13.01 A	13.05 A	13.09 A	13.13 A	13.17 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	TOPCon cells
Cell Arrangement	108 [2 x (9 x 6)]
Dimensions	1961 × 1134 × 30 mm (77.2 × 44.6 × 1.18 in)
Weight	23.7 kg (52.2 lbs)
Front Glass	1.6 mm heat strengthened glass with anti-reflective coating
Back Glass	1.6 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	Tlian: T6 Stäubli: PV-KST4-EVO2A/6I, PV-KBT4-EVO2A/6I
Per Pallet	36 pieces
Per Container (40' HQ)	864 pieces

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

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

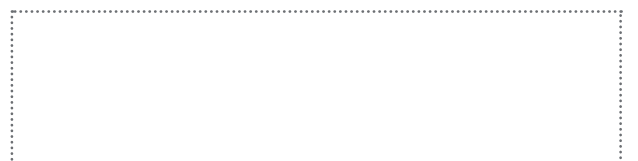
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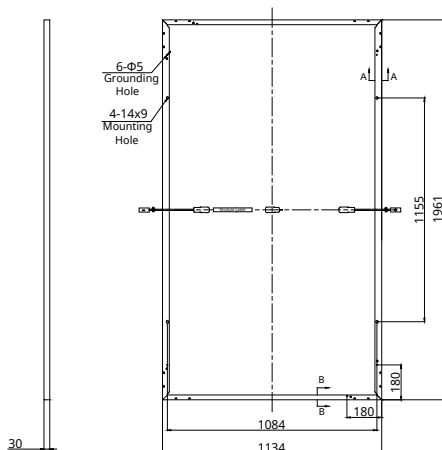
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* Manufactured and assembled in China and Thailand.

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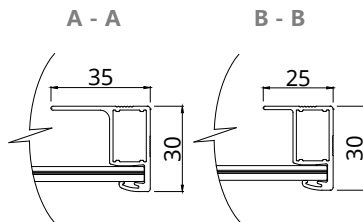


ENGINEERING DRAWING (mm)

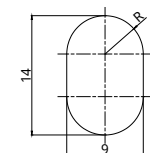
Rear View



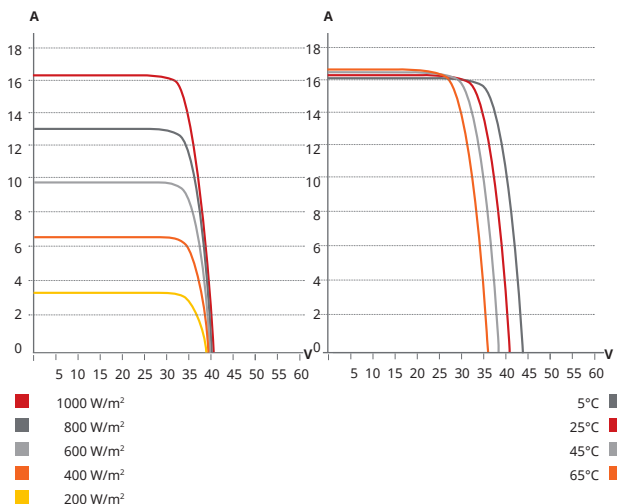
Frame Cross Section



Mounting Hole



CS6.2-54TD-530 (IEC1500V) / I-V CURVES



ELECTRICAL DATA (STC*) | CS6.2-54TD-xxx (IEC1500V) (xxx=540-550)

CS6.2-54TD	540	545	550
Nominal Max. Power (Pmax)	540 W	545 W	550 W
Opt. Operating Voltage (Vmp)	35.0 V	35.2 V	35.4 V
Opt. Operating Current (Imp)	15.45 A	15.50 A	15.55 A
Open Circuit Voltage (Voc)	41.4 V	41.8 V	42.0 V
Short Circuit Current (Isc)	16.40 A	16.45 A	16.50 A
Module Efficiency	24.3%	24.5%	24.7%
Operating Temperature	-40°C ~ +85°C		
Module (T98)max	70°C		
Max. System Voltage	1500V (IEC)		
Module Fire Performance	CLASS C (IEC 61730)		
Max. Series Fuse Rating	30 A		
Protection Class	Class II		
Power Tolerance	- 5 W ~ + 10 W		

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ELECTRICAL DATA (NMOT*) | CS6.2-54TD-xxx (IEC1500V) (xxx=540-550)

CS6.2-54TD	540	545	550
Nominal Max. Power (Pmax)	408 W	412 W	416 W
Opt. Operating Voltage (Vmp)	33.1 V	33.3 V	33.5 V
Opt. Operating Current (Imp)	12.35 A	12.39 A	12.43 A
Open Circuit Voltage (Voc)	39.2 V	39.6 V	39.8 V
Short Circuit Current (Isc)	13.21 A	13.25 A	13.29 A

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Cable	4 mm² (IEC)
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