



Realizzazione di un impianto agrivoltaico denominato

“MANDRAZZE”

di potenza nominale di 35 MW e potenza di picco 35,89209 MWp
posizionato a terra

ubicato in C.da Mandrazze nel Comune di Catania (CT)

Codice elaborato	Data	Livello progettazione	Emesso	Verificato	Approvato	REV.
16-PD.16	MAR 2022	DEFINITIVO	G.VICINO	G.VICINO	G.VICINO	

ELABORATO:

SCHEDE TECNICHE PRINCIPALI COMPONENTI

Rel.

Società Proponente:

Timbri e firme:

AMBRA SOLARE 50 S.R.L.
Via Tevere,41
00198 ,Roma,Italy
email: ambrasolare50srl@legalmail.it

Progettazione:

Timbri e firme:



E-PRIMA

E-PRIMA S.R.L.
Via Manganelli 20/G - 95030 Nicolosi (CT)
tel:095914116 - cell:3339533392
email:info@e-prima.eu

SUN2000-215KTL-H3

Smart String Inverter



100A
Per MPPT



99.0%
Max. Efficiency



String-Smart
Switch



Smart I-V Curve
Diagnosis Supported



MBUS
Supported



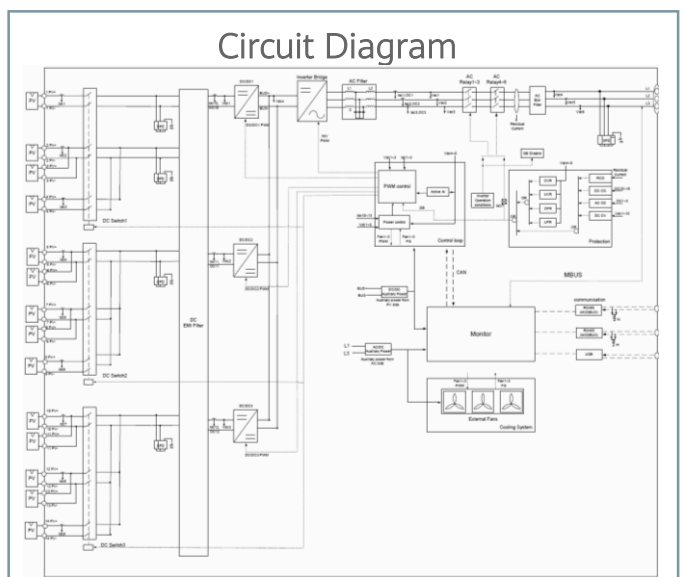
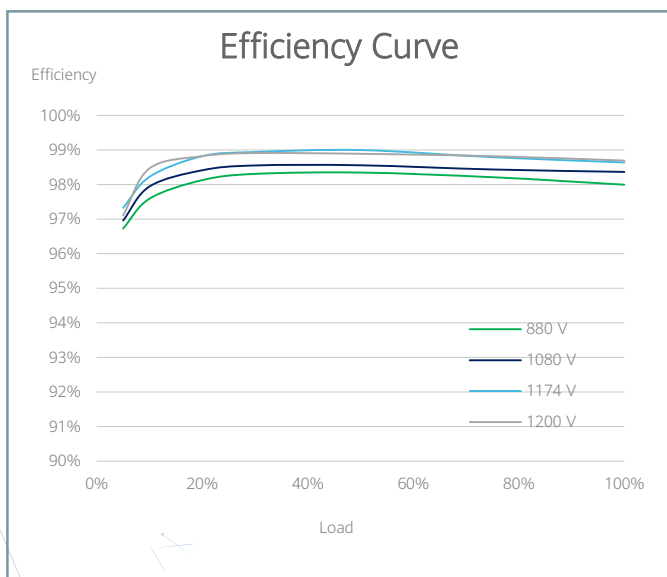
Fuse Free
Design



Surge Arresters for
DC & AC

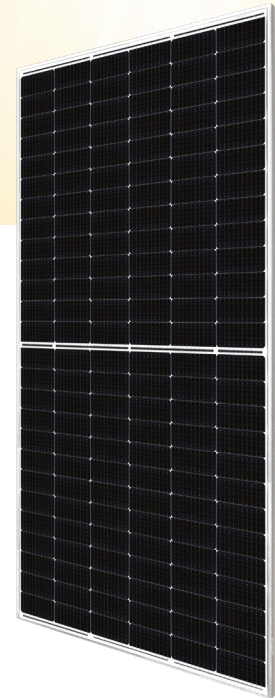


IP66
Protection



Technical Specifications

Efficiency	
Max. Efficiency	≥99.0%
European Efficiency	≥98.6%
Input	
Max. Input Voltage	1,500 V
Number of MPP Trackers	3
Max. Current per MPPT	100A/100A/100A
Max. PV Inputs per MPPT	4/5/5
Start Voltage	550 V
MPPT Operating Voltage Range	500 V ~ 1,500 V
Nominal Input Voltage	1,080 V
Output	
Nominal AC Active Power	200,000 W
Nominal Output Voltage	800 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	144.4 A
Adjustable Power Factor Range	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 1%
Protection	
Input-side Disconnection Device	Yes
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Monitoring Unit	Yes
Communication	
Display	LED Indicators, WLAN + APP
USB	Yes
MBUS	Yes
RS485	Yes
General	
Dimensions (W x H x D)	1,035 x 700 x 365 mm (40.7 x 27.6 x 14.4 inch)
Weight (with mounting plate)	≤86 kg (191.8 lb.)
Operating Temperature Range	-25°C ~ 60°C (-13°F ~ 140°F)
Cooling Method	Smart Air Cooling
Max. Operating Altitude without Derating	4,000 m (13,123 ft.)
Relative Humidity	0 ~ 100%
DC Connector	Staubli MC4 EVO2
AC Connector	Waterproof Connector + OT/DT Terminal
Protection Degree	IP66
Topology	Transformerless



HiKu6 Mono

570 W ~ 590 W

CS6Y-570 | 575 | 580 | 585 | 590MS

MORE POWER



Module power up to 590 W
Module efficiency up to 21.3 %



Lower LCOE & BOS cost,
cost effective product for utility power plant



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



Compatible with mainstream trackers



Better shading tolerance

MORE RELIABLE



Minimizes micro-crack impacts



Heavy snow load up to 5400 Pa,
wind load up to 2400 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
OHSAS 18001:2007 / International standards for occupational health & safety

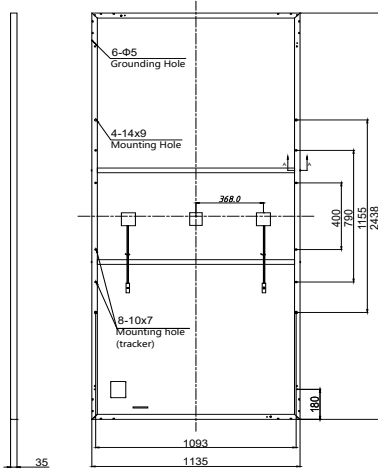
PRODUCT CERTIFICATES*

* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

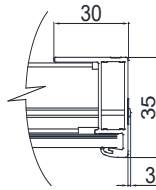
* For detailed information, please refer to the Installation Manual.

ENGINEERING DRAWING (mm)

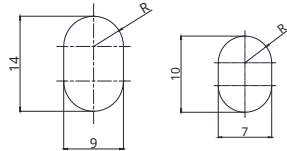
Rear View



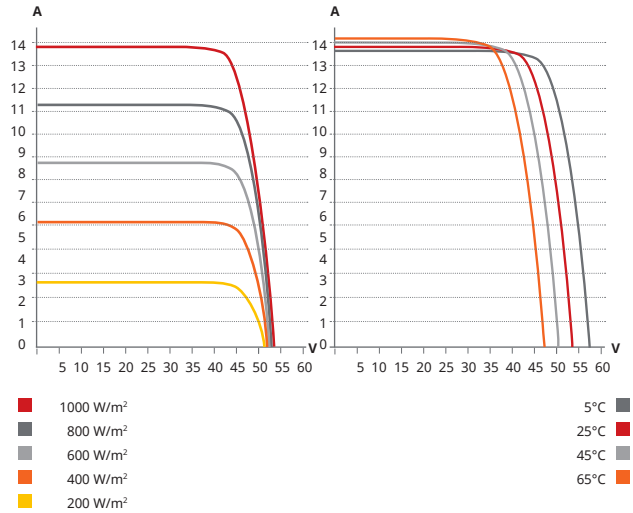
Frame Cross Section A-A



Mounting Hole



CS6Y-580MS / I-V CURVES



ELECTRICAL DATA | STC*

CS6Y	570MS	575MS	580MS	585MS	590MS
Nominal Max. Power (Pmax)	570 W	575 W	580 W	585 W	590 W
Opt. Operating Voltage (Vmp)	43.8 V	44.0 V	44.2 V	44.4 V	44.6 V
Opt. Operating Current (Imp)	13.02 A	13.07 A	13.13 A	13.18 A	13.23 A
Open Circuit Voltage (Voc)	52.8 V	53.0 V	53.2 V	53.4 V	53.6 V
Short Circuit Current (Isc)	13.77 A	13.82 A	13.87 A	13.92 A	13.97 A
Module Efficiency	20.6%	20.8%	21.0%	21.1%	21.3%
Operating Temperature	-40°C ~ +85°C				
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)				
Module Fire Performance	TYPE 1 (UL 61730) or CLASS C (IEC 61730)				
Max. Series Fuse Rating	25 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.

ELECTRICAL DATA | NMOT*

CS6Y	570MS	575MS	580MS	585MS	590MS
Nominal Max. Power (Pmax)	425 W	429 W	433 W	436 W	440 W
Opt. Operating Voltage (Vmp)	40.8 V	41.0 V	41.2 V	41.4 V	41.6 V
Opt. Operating Current (Imp)	10.42 A	10.47 A	10.51 A	10.54 A	10.58 A
Open Circuit Voltage (Voc)	49.7 V	49.9 V	50.1 V	50.2 V	50.4 V
Short Circuit Current (Isc)	11.11 A	11.15 A	11.19 A	11.23 A	11.27 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	Mono-crystalline
Cell Arrangement	156 [2 x (13 x 6)]
Dimensions	2438 x 1135 x 35 mm (96.0 x 44.7 x 1.38 in)
Weight	31.0 kg (68.3 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy, 2 crossbars enhanced
J-Box	IP68, 3 bypass diodes
Cable	4 mm ² (IEC), 12 AWG (UL)
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)	540 pieces

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

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



* 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.

CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, www.canadiansolar.com, support@canadiansolar.com