

# PROCEDURA ABILITATIVA SEMPLIFICATA (P.A.S.)

(art. 6 D.Lgs. 3 Marzo 2011 n.28)

Progetto per la realizzazione di una centrale di generazione elettrica da fonte rinnovabile fotovoltaica da 7.847,84 kW

## LOCALIZZAZIONE

*Via Fontana Martino- Comune di Ceprano (FR)*  
**PROVINCIA DI FROSINONE**  
**REGIONE LAZIO**

## COMMITTENTE

## STUDIO DI FATTIBILITÀ



### SOLAR FUTURE s.r.l.

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## TIMBRI E FIRME

SOLAR FUTURE SRL  
VIA ALDO MORO n. 233  
03100 Frosinone (FR)  
P.IVA 03158190607



## SCHEDE TECNICHE IMPIANTO

REV	FASE	CODICE	DATA	SCALA	PROGETTO
01	03	ECG-FV-079-STI	08/2021	NA	DEFINITIVO

## REDATTO ED APPROVATO:

ECONTAMINAZIONI GROUP s.r.l. - Via Aldo Moro N.233 - 03100 - Frosinone (FR)  
Ing. Stefano Spaziani

www.jinkosolar.com

**Jinko**<sup>Solar</sup>  
Building Your Trust in Solar

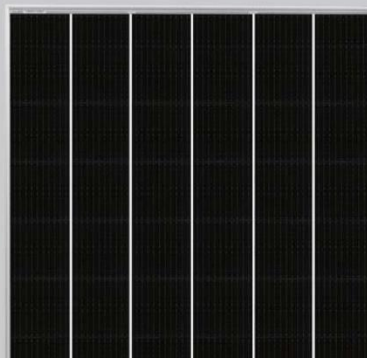
## TR 78M 560-580 Watt Mono-facial

Tiling Ribbon (TR) Technology

Positive power tolerance of 0~+3%

(Draft)

### TIGER Pro



### KEY FEATURES



#### TR technology + Half Cell

TR technology with Half cell aims to eliminate the cell gap to increase module efficiency (mono-facial up to 21.21%)



#### MBB instead of 5BB

MBB technology decreases the distance between bus bars and finger grid line which is benefit to power increase.



#### Higher lifetime Power Yield

2% first year degradation,  
0.55% linear degradation



#### Best Warranty

12 year product warranty,  
25 year linear power warranty



#### Strengthened Mechanical Support

5400 Pa snow load, 2400 Pa wind load

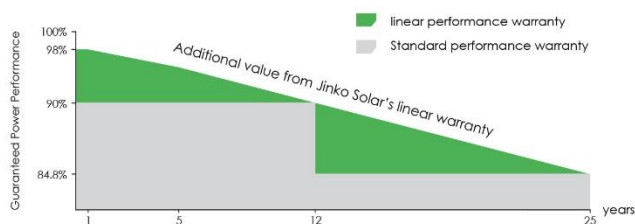


ISO9001:2015, ISO14001:2015, ISO45001:2018  
certified factory

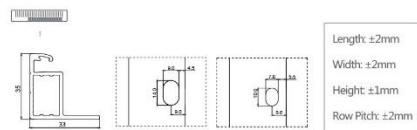
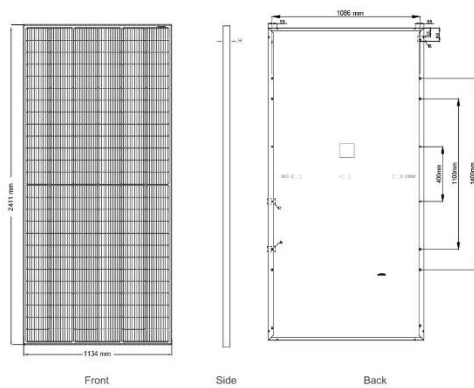
IEC61215, IEC61730 certified product

### LINEAR PERFORMANCE WARRANTY

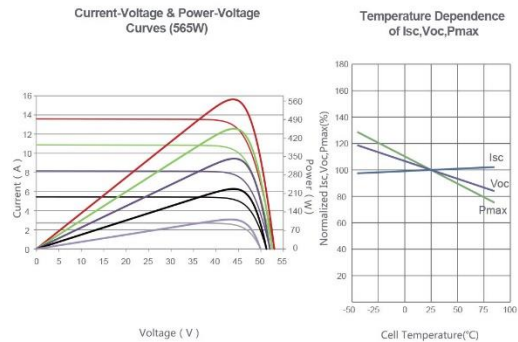
12 Year Product Warranty • 25 Year Linear Power Warranty  
0.55% Annual Degradation Over 25 years



## Engineering Drawings



## Electrical Performance &amp; Temperature Dependence



## Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	156 (2×78)
Dimensions	2411×1134×35mm (94.92×44.65×1.38 inch)
Weight	30.93 kg (68.2 lbs)
Front Glass	3.2mm Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>2</sup> (+): 290mm, (-): 145 mm or Customized Length

## Packaging Configuration

(Two pallets = One stack)

31pcs/pallets, 62pcs/stack, 496pcs/ 40'HQ Container

## SPECIFICATIONS

Module Type	JKM560M-7RL4-V		JKM565M-7RL4-V		JKM570M-7RL4-V		JKM575M-7RL4-V		JKM580M-7RL4-V	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	560Wp	417Wp	565Wp	420Wp	570Wp	424Wp	575Wp	428Wp	580Wp	432Wp
Maximum Power Voltage (Vmp)	44.31V	40.63V	44.43V	40.72V	44.55V	40.80V	44.67V	40.89V	44.78V	40.97V
Maximum Power Current (Imp)	12.64A	10.25A	12.72A	10.32A	12.80A	10.39A	12.88A	10.46A	12.96A	10.53A
Open-circuit Voltage (Voc)	52.90V	49.93V	53.00V	50.03V	53.10V	50.12V	53.20V	50.21V	53.30V	50.31V
Short-circuit Current (Isc)	13.50A	10.90A	13.58A	10.97A	13.66A	11.03A	13.74A	11.10A	13.82A	11.16A
Module Efficiency STC (%)	20.48%		20.67%		20.85%		21.03%		21.21%	
Operating Temperature(°C)	-40°C~+85°C									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.35%/°C									
Temperature coefficients of Voc	-0.28%/°C									
Temperature coefficients of Isc	0.048%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

\* STC: Irradiance 1000W/m<sup>2</sup> Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m<sup>2</sup> Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s

\* Power measurement tolerance:  $\pm 3\%$ ©2020 Jinko Solar Co., Ltd. All rights reserved.  
Specifications included in this datasheet are subject to change without notice.

TR JKM560-580M-7RL4-V-D5-EN



## Convert TRJ Technical Data Sheet

Single Axis Tracker TRJHT30PDP

Annex 2 - Convert TRJ Datasheet Tracker  
1x30.docx



### SOLAR TRACKING

Type of tracking system: horizontal single axis tracking system with back-tracking.

Tilt 0°.

Azimuth 0°.

Rotation angle  $\pm 55^\circ$ .

Maximum tracking error  $\pm 2^\circ$ .

### MECHANICAL SPECIFICATIONS

1 x 30 PV-modules in portrait configuration.

Dimensions [m] 30,62 x 2,00 x 2,06 (h Max).

Minimum height over ground at maximum tilt angle: 0.4 m.

Foundation type: 5 directly driven foundation posts.

Photovoltaic area 58,2 m<sup>2</sup>.

Length of PV area 30,62 m.



## SUNWAY STATION 2000 1500V 640 LS

Fully Integrated Solar Power Station







Main features			
Model	SUNWAY STATION 1800 1500V 640 LS		
Inverter	1 x SUNWAY TG 1800 1500V TE 640 STD		
Number of independent MPPT	2		
Rated output frequency	50 Hz / 60 Hz		
Power Factor @ rated power	1 - 0.9 lead/lag		
Maximum operating altitude <sup>(2)</sup>	4000 m a.s.l.		
Maximum value for relative humidity	100% condensing		
Input (DC)			
Max. Open-circuit voltage	1500 V		
PV Voltage Ripple	< 1%		
Maximum DC inputs fuse-protected	7 (with DC fuses on both poles)		
Maximum short circuit PV input current	1500 A		
Output (AC)			
Ambient Temperature	25 °C	45 °C	50 °C
Rated output current, LV side	1800 A	1600 A	1500 A
Rated output power, LV side	1995 kVA	1774 kVA	1663 kVA
Power threshold	< 1% of Rated AC inverter output power		
Total AC current distortion	≤ 3 %		
Rated AC voltage, MV side	6 to 24 kV (up to 30 kV on request)		
Connection phases, MV side	3Ø3W		
Inverter efficiency - LV side <sup>(3)</sup>			
Maximum / EU/ CEC efficiency	98.5% / 98.2 % / 98.0%		
MV transformer			
Type	Cast resin (standard) / Oil (available as option)		
Transformer rated power	Up to 2000 kVA		
Fuse protection	Yes		
Temperature control	Yes		
Oil pressure control <sup>(4)</sup>	Yes		
MV Cabinet			
Type	Compact SF6 for secondary distribution		
Standard Configuration <sup>(6)</sup>	R+CB (Input Line + Transformer Protection by Circuit Breaker)		
Insulation Class	17.5 / 24 / 36 kV (Others available)		
Dimensions and weight <sup>(5)</sup>			
Cabinet Dimensions (WxHxD)	8250 x 3230 x 2400 mm (for reference)		
Overall Weight	23000 kg (for reference)		

## NOTES

<sup>(1)</sup> At rated Vac and Cos φ =1<sup>(2)</sup> Up to 1000 m without derating<sup>(3)</sup> Auxiliary consumptions are not considered when calculating the conversion efficiency<sup>(4)</sup> Only for oil type transformers<sup>(5)</sup> Dimensions and weight not applicable to Sunway Station LC version with structure fully made of concrete<sup>(6)</sup> The MV cabinet composition can be customized

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## SUNWAY STATION 500 1500V 640 LS

Fully Integrated Solar Power Station





Main features	
Model	SUNWAY STATION 500 1500V 640 LS
Inverter	1 x SUNWAY TG 900 1500V TE 640 STD (w custom output power 500 kVA)
Number of independent MPPT	1
Rated output frequency	50 Hz / 60 Hz
Power Factor @ rated power	1 - 0.9 lead/lag
Maximum operating altitude <sup>(2)</sup>	4000 m a.s.l.
Maximum value for relative humidity	100% condensing
Input (DC)	
Max. Open-circuit voltage	1500 V
PV Voltage Ripple	< 1%
Maximum DC inputs fuse-protected	7 (with DC fuses on both poles)
Maximum short circuit PV input current	1500 A
Output (AC)	
Rated output current, LV side	451 A
Rated output power, LV side (up to 50°C)	500 kVA
Power threshold	< 1% of Rated AC inverter output power
Total AC current distortion	≤ 3 %
Rated AC voltage, MV side	6 to 24 kV (up to 30 kV on request)
Connection phases, MV side	3Ø3W
Inverter efficiency - LV side <sup>(3)</sup>	
Maximum / EU/ CEC efficiency	98.5% / 98.2 % / 98.0%
MV transformer	
Type	Cast resin (standard) / Oil (available as option)
Transformer rated power	500 kVA
Fuse protection	Yes
Temperature control	Yes
Oil pressure control <sup>(4)</sup>	Yes
MV Cabinet	
Type	Compact SF6 for secondary distribution
Standard Configuration <sup>(6)</sup>	R+SF (Input Line + Transformer Protection by Switch + Fuse combination )
Insulation Class	17.5 / 24 / 36 kV (Others available)
Dimensions and weight <sup>(5)</sup>	
Cabinet Dimensions (WxHxD)	85 x 323 x 24 m (for reference)
Overall Weight	20000 kg (for reference)

## NOTES

<sup>(1)</sup> At rated Vac and Cos φ =1<sup>(2)</sup> Up to 1000 m without derating<sup>(3)</sup> Auxiliary consumptions are not considered when calculating the conversion efficiency<sup>(4)</sup> Only for oil type transformers<sup>(5)</sup> Dimensions and weight not applicable to Sunway Station LC version with structure fully made of concrete<sup>(6)</sup> The MV cabinet composition can be customized

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