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Via Aldo Moro, 233

03100 - Frosinone (FR)

C.F. e P.IVA: 03118730609

EGP MAZZOCCHIO SRL

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**STUDIO DI FATTIBILITÀ****ECONTAMINAZIONI GROUP s.r.l.**

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C.F. e P.IVA: 03060180605

**Econtaminazioni Group S.r.l.**

Via Aldo Moro, 233

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**PROGETTO PER LA REALIZZAZIONE DI UNA CENTRALE DI  
GENERAZIONE ELETTRICA DA FONTE RINNOVABILE  
AGROVOLTAICA DA 18.419,10 kW  
Denominata "EGPM-FV082"**

**SCHEDE TECNICHE IMPIANTO**

Procedura Di Valutazione Di Impatto Ambientale (V.I.A.)  
(artt.23-24-24bis-25 D.Lgs. 152/2006 - art.216 c.27 del D.Lgs.50/2016 -  
artt.165 e 183 del D.Lgs.163/2006)

REV	FASE	CODICE	DATA	SCALA	PROGETTO
01	03	EGPM-FV082-STI	11/2021	NA	DEFINITIVO

**REDATTO ED APPROVATO:**

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



www.jinkosolar.com



**TR Bifacial 72M**  
**515-535 Watt**

Tiling Ribbon (TR) Technology






Positive power tolerance of 0~+3%

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

IEC61215, IEC61730 certified product



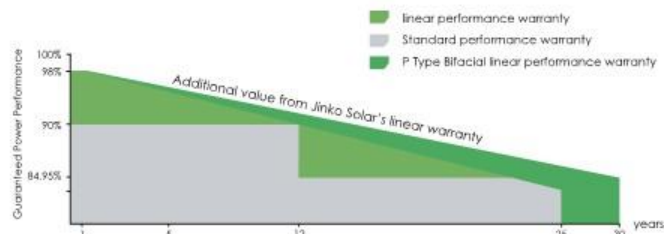
**KEY FEATURES**

- 
**TR technology + Half Cell**  
 TR technology with Half cell aims to eliminate the cell gap to increase module efficiency (bi-facial up to 21.16%)
- 
**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, 0.45% linear degradation
- 
**Best Warranty**  
 12 year product warranty, 30 year linear power warranty
- 
**Strengthened Mechanical Support**  
 5400 Pa snow load, 2400 Pa wind load

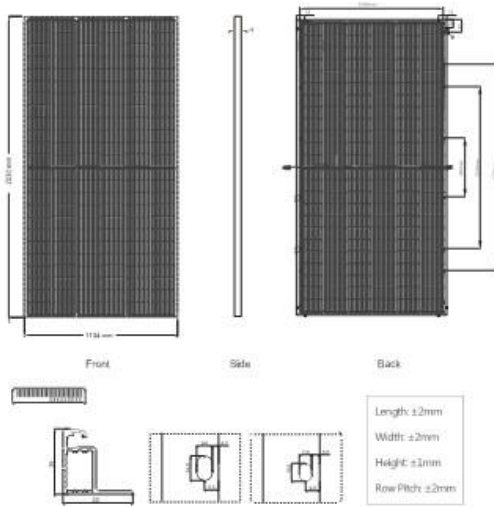


**LINEAR PERFORMANCE WARRANTY**

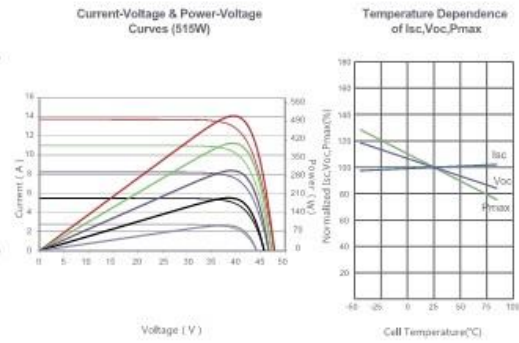
12 Year Product Warranty • 30 Year Linear Power Warranty  
 0.45% Annual Degradation Over 30 years



Engineering Drawings



Electrical Performance & Temperature Dependence



Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	144 (2x72)
Dimensions	2230x1134x35mm (87.80x44.65x1.38 inch)
Weight	28.9 kg (63.71 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 1x4.0mm <sup>2</sup> (+): 290mm, (-): 145mm or Customized Length

Packaging Configuration

(Two pallets = One stack)  
31pcs/pallets, 62pcs/stack, 620pcs/ 40'HQ Container

SPECIFICATIONS

Module Type	JKM515M-7TL4-TV		JKM520M-7TL4-TV		JKM525M-7TL4-TV		JKM530M-7TL4-TV		JKM535M-7TL4-TV	
	SCT	NOCT	SCT	NOCT	SCT	NOCT	SCT	NOCT	SCT	NOCT
Maximum Power (Pmax)	515Wp	383Wp	520Wp	387Wp	525Wp	391Wp	530Wp	394Wp	535Wp	398Wp
Maximum Power Voltage (Vmp)	40.08V	37.27V	40.22V	37.42V	40.36V	37.56V	40.49V	37.70V	40.63V	37.84V
Maximum Power Current (Imp)	12.85A	10.28A	12.93A	10.34A	13.01A	10.40A	13.09A	10.46A	13.17A	10.52A
Open-circuit Voltage (Voc)	48.58V	45.85V	48.72V	45.99V	48.86V	46.12V	48.99V	46.24V	49.13V	46.37V
Short-circuit Current (Isc)	13.53A	10.93A	13.61A	10.99A	13.69A	11.06A	13.77A	11.12A	13.85A	11.19A
Module Efficiency STC (%)	20.37%		20.56%		20.76%		20.96%		21.16%	
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									
Refer. Bifacial Factor	70±5%									

BIFACIAL OUTPUT-REARSIDE POWER GAIN

		5%	15%	25%	
Maximum Power (Pmax)	541Wp	546Wp	551Wp	557Wp	562Wp
Module Efficiency STC (%)	21.38%	21.59%	21.80%	22.01%	22.21%
Maximum Power (Pmax)	592Wp	598Wp	604Wp	610Wp	615Wp
Module Efficiency STC (%)	23.42%	23.65%	23.87%	24.10%	24.33%
Maximum Power (Pmax)	644Wp	650Wp	656Wp	663Wp	669Wp
Module Efficiency STC (%)	25.46%	25.70%	25.95%	26.20%	26.45%

\*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

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 Specifications included in this datasheet are subject to change without notice.

TR JKM515-535M-7TL4-TV-A1-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 300 1500V 600 LS

Fully Integrated Solar Power Station





Main features	
Model	SUNWAY STATION 300 1500V 600 LS
Inverter	1 x SUNWAY TG 900 1500V TE 600 STD (w custom output power 300 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	290 A
Rated output power, LV side (up to 50°C)	300 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	300 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	19000 kg (for reference)

## NOTES

<sup>(1)</sup> At rated  $V_{ac}$  and  $\cos \varphi = 1$

<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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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 V<sub>ac</sub> 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







## SUNWAY STATION 1000 1500V 640 LS

Fully Integrated Solar Power Station







Main features			
Model	SUNWAY STATION 1000 1500V 640 LS		
Inverter	1 x SUNWAY TG 900 1500V TE 640 STD		
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)			
Ambient Temperature	25 °C	45 °C	50 °C
Rated output current, LV side	900 A	800 A	750 A
Rated output power, LV side	998 kVA	887 kVA	832 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	1000 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	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 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

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