

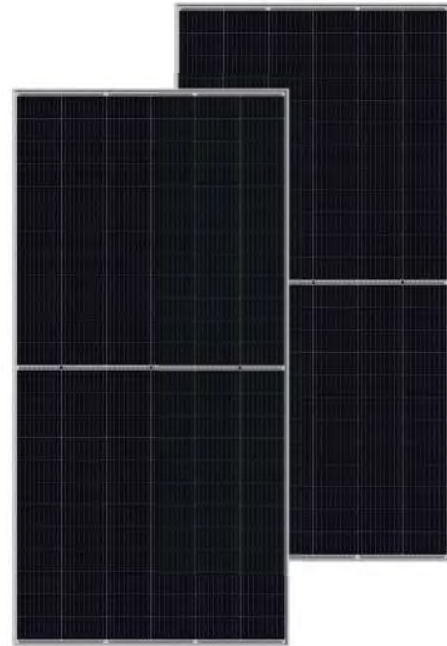
## Appendix F: Product Information

# BIPRO

TP6G72M  
TP6G72M(H) **144 half-cell**

**390 - 415W**

bifacial transparent single glass  
9BB half-cut mono perc



## KEY FEATURES



### 9BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss



### Industry leading high yield

Bifacial PERC cell technology,  
5%-25% more yield depends on different conditions



### Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD



### Wider application

No water-permeability and high wear-resistance,  
can be widely used in high-humid, windy and dusty area



### IP68 junction box

High waterproof level

## SYSTEM & PRODUCT CERTIFICATES

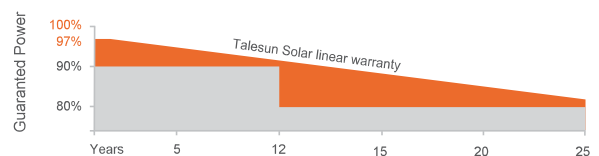
- IEC 61215 / IEC 61730 / UL 1703
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



## PERFORMANCE WARRANTY



- Talesun standard
- Industry standard



## ELECTRICAL PARAMETERS

### Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	390	395	400	405	410	415
Operating Voltage (Vmpp/V)	40.8	41.1	41.4	41.7	42.0	42.3
Operating Current (Impp/A)	9.56	9.61	9.67	9.72	9.77	9.82
Open-Circuit Voltage (Voc/V)	48.7	48.9	49.1	49.3	49.5	49.7
Short-Circuit Current (Isc/A)	10.08	10.14	10.20	10.26	10.32	10.38
Module Efficiency ηm(%)	19.06	19.3	19.55	19.79	20.04	20.28

### Performance at NMOT

Maximum Power (Pmax/W)	291.5	295.1	298.8	302.4	306.1	309.8
Operating Voltage (Vmpp/V)	38.1	38.3	38.5	38.8	39.0	39.2
Operating Current (Impp/A)	7.65	7.70	7.75	7.80	7.86	7.91
Open-Circuit Voltage (Voc/V)	45.6	45.7	45.9	46.1	46.3	46.4
Short-Circuit Current (Isc/A)	8.13	8.18	8.23	8.27	8.32	8.37

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

### Electrical characteristics with different rear side power gain (refer to 400W front)

Pmax gain	Pmax/W	Vmpp/V	Impp/A	Voc/V	Isc/A
5%	420	41.4	10.14	49.1	10.71
10%	440	41.4	10.63	49.1	11.22
15%	460	41.4	11.11	49.1	11.73
20%	480	41.4	11.59	49.1	12.24
25%	500	41.4	12.08	49.1	12.75

## MECHANICAL SPECIFICATION

Cell Type	Half-cell 9 busbar
Cell Dimensions	158.75*158.75mm (6inches)
Cell Arrangement	144 (6*24)
Weight	23.5kg (51.8lbs)
Module Dimensions	2030*1008*35mm (79.72*39.68*1.38inches)
Cable Length (Portrait)	(+)-300mm (11.81inches) / (-)300mm (11.81inches)
Cable Length (Landscape)	(+)-1200mm (47.24inches) / (-)1200mm (47.24inches)
Cable Cross Section Size	4mm <sup>2</sup> (0.006inches <sup>2</sup> )
Front Glass	3.2mm High Transmission, Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration(1)	31pcs/carton, 682pcs/40hq
Packing Configuration(2)	31+3pcs/carton, 715pcs/40hq
Frame	Anodized Aluminium Alloy
Junction Box	IP68

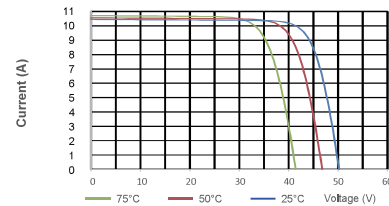
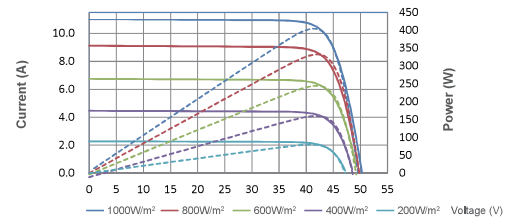
## OPERATING CONDITIONS

Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximun Series Fuse	20A
Static Loading	5400pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 Compatible
Backside Output Ratio*	60% - 80%
*Under STC: Backside Output Ratio = P <sub>max(rear)</sub> / P <sub>max(front)</sub>	

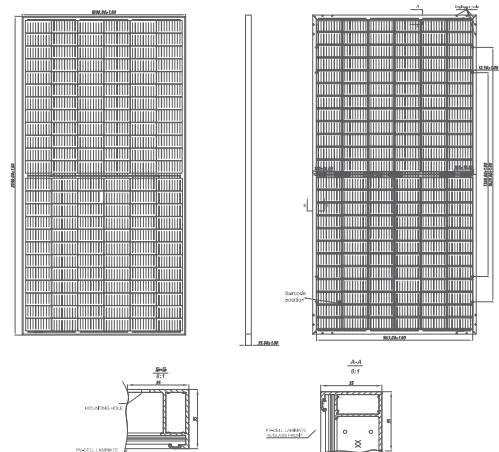
## TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/°C
Temperature Coefficient Voc	-0.26%/°C
Temperature Coefficient Isc	+0.043%/°C
NMOT	42±2°C

## I-V CURVE



## TECHNICAL DRAWINGS





# TDP™ 2.0 TURNKEY SOLAR TRACKER

## With *BalanceTrac*

™ TDP is a trademark of Solar FlexRack



### Tough, Reliable Tracker & Team of Experts at Your Service

Solar FlexRack's new TDP 2.0 Turnkey Solar Tracker with complete project support services for commercial and utility-scale solar installations introduces an advanced design featuring new *BalanceTrac*. This next-generation technology enables solar power plants to increase energy yield while significantly reducing project risks. That translates to smart installation cost-savings across your project budget.

#### The Only Tracker Solution with:

- Full Design
- Installation
- Commissioning Services

#### Increased Energy Yield

TDP 2.0 with new *BalanceTrac* is efficiently designed to support more modules per row, a rotational range of up to 110°, and is compatible with 1,000 and 1500V modules. These key features enable significant energy production gains in solar power plants.

#### Greater Adjustability To Maximize Performance

TDP 2.0 Tracker has up to a 10% slope tolerance that can eliminate the need to level land. Independently driven rows provide easy access for mowing, cleaning and maintenance. Autonomous tables increase design flexibility to maximize ground coverage on irregular and non-adjacent lots. Programmable granular backtracking, snow shedding and new wind damper technology mitigate inclement climatic events and reduce risk of tracker damage. All of these features compound to increase system performance.

#### Installations Fly with Solar FlexRack

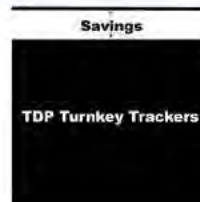
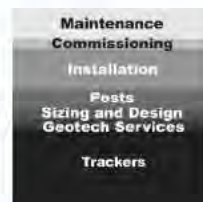
No special equipment or additional steps are required to square your racking. The proprietary design allows modules to easily slide into place, accelerating the process, and reducing installation time.

#### Complete Support Services Reduce Project Risks And Costs

A tracker solution that comes with all the critical associated support services and an unmatched team of experts that will significantly reduce your risks and project costs. Project management is simplified, redundancies are eliminated, and you have one highly-experienced supplier-instead of many.

#### Increased Yield & Reduced Costs

- More modules per row (up to 90)
- Rotational range of up to 110° (±55°)
- Optimized for 1,000 & 1,500V modules
- Lower per-unit fixed costs for balance of system savings
- Allows shorter piles
- Programmable technology to mitigate inclement climatic conditions
- installations fly with no prying, adjusting or special tools
- Built to last, the robust design reduces amount of tracker components and wear
- Autonomous tables increase design flexibility to maximize land use
- Smart backtracking reduces row shading to optimize energy production
- Independently driven rows provide easy access for mowing, cleaning and other maintenance





# TDP™ 2.0 Turnkey Solar Tracker with *BalanceTrac*

## TESTING

Rain, wind, sleet, snow, heat – every day and everywhere, our products are battling the elements.

We perform ongoing extensive testing in these key areas: wind tunnel, structural load, electrical bonding, and life cycle.

Solar FlexRack trackers also undergo wind tunnel testing performed by RWDI, per American Society Of Civil Engineers Standard ASCE 7.

## UL COMPLIANCE

All Solar FlexRack systems have gone through UL testing.

Each component-connection point within the system conforms to NEC codes for electrically bonded and conductive systems.

Testing is performed by TUV Rheinland in accordance with UL 2703.

Certification covers both United States and Canada.

Find out more about Solar FlexRack product reliability and testing at <http://solarflexrack.com/products/testing>



Learn more about our Preferred Installer Program: <http://solarflexrack.com/resources/preferred-installer-program/>

TRACKING	
<b>Tracking method</b>	Single-axis horizontal, distributed drive
<b>Backtracking</b>	Smart backtracking - customized to terrain for maximum production
<b>Tracking range</b>	Up to 110° (± 55°)
<b>Ground coverage ratio (GCR)</b>	Configurable (0.33 to 0.50)
<b>Tracking accuracy</b>	2°
<b>Stow Angle</b>	Configurable

ARRAY CONFIGURATION	
<b>Panels per tracker</b>	Up to 90
<b>Trackers per controller</b>	1
<b>String voltage</b>	Up to 1,500 Volts
<b>Panel configurations</b>	1 in portrait (crystalline) 2 in landscape (crystalline) 4 in landscape (thin film)
<b>Drive type</b>	Slew 24 Volts dc

OPERATIONS & MAINTENANCE	
<b>Scheduled maintenance</b>	None
<b>Warranty</b>	10 Years: Structural and Controllers 5 Years: Drives and Electrical
<b>Certifications</b>	UL 2703
<b>Dynamic load management</b>	Limited progressive damping technology
<b>Snow management</b>	Programmable snow shedding

INSTALLATION & TOLERANCES	
<b>North-south slope tolerance</b>	Up to 10%
<b>North-south post spacing</b>	± 1.5 inches
<b>East-west post alignment</b>	± 0.625 inches
<b>Post height</b>	± 1 inch
<b>Post plumb</b>	± 1°
<b>Post twist</b>	± 2°
<b>Tube twist</b>	± 2°

CONSTRUCTION	
<b>Structural materials</b>	Hot dip galvanized steel
<b>Bearings</b>	UV-rated engineering plastic, no lubrication needed
<b>Mechanical connections</b>	Bolted - no welding, drilling or cutting required

CONTROL SYSTEM	
<b>Data feed</b>	Ethernet, Zigbee, SCADA
<b>Power consumption</b>	31 kWh per tracker per year

ENVIRONMENTAL	
<b>Operating temperature</b>	-30 °C to +60 °C
<b>Wind Stow</b>	105 mph (Up to 130 mph) 35 mph
<b>Snow load</b>	10 psf (standard) Higher snow load available upon request



TDP 2.0 TURNKEY SOLAR TRACKER With *BalanceTrac*

## Support Services

- ✓ Geotechnical Services
- ✓ Structural Analysis
- ✓ Layout & Design
- ✓ Foundation Design Services
- ✓ Post Driving
- ✓ Pull Testing
- ✓ Tracking System Installation
- ✓ Visual Inspection of Trackers
- ✓ Preferred Installer Network
- ✓ Post, Rack & Module Installation
- ✓ Configuration of Tracker Controls
- ✓ Configuration of Network Controls
- ✓ Project Management
- ✓ PE Stamp
- ✓ Onsite Training
- ✓ Commissioning
- ✓ Remote Data Monitoring & Reporting

## Over 2.0 Gigawatts of Solar FlexRack Installed

Solar FlexRack, a division of Northern States Metals, is an integrated solar company that offers custom-designed, fixed tilt ground mount and single-axis solar tracking systems in the commercial, community solar and utility-scale solar mounting industries. Solar FlexRack offers full turnkey packages including engineering, geotechnical, pullout testing, field, layout, and installation services to address the actual site conditions of an installation and provide a full scope of services from design to delivery and installation. Solar FlexRack has completed over 2 GW of solar racking installations in 40 states across America and five countries globally.

For more information on Solar FlexRack visit: [www.solarflexrack.com](http://www.solarflexrack.com)



**BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE**

PRODUCT: **TSM-DEG19C.20**

PRODUCT RANGE: **525-550W**

**550W+**

MAXIMUM POWER OUTPUT

**0~+5W**

POSITIVE POWER TOLERANCE

**21.0%**

MAXIMUM EFFICIENCY



**High customer value**

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- High return on Investment



**High power up to 550W**

- Up to 21.0% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



**High reliability**

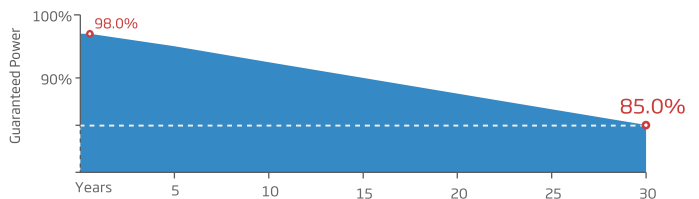
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



**High energy yield**

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature
- Up to 25% additional power gain from back side depending on albedo

**Trina Solar's Vertex Bifacial Dual Glass Performance Warranty**

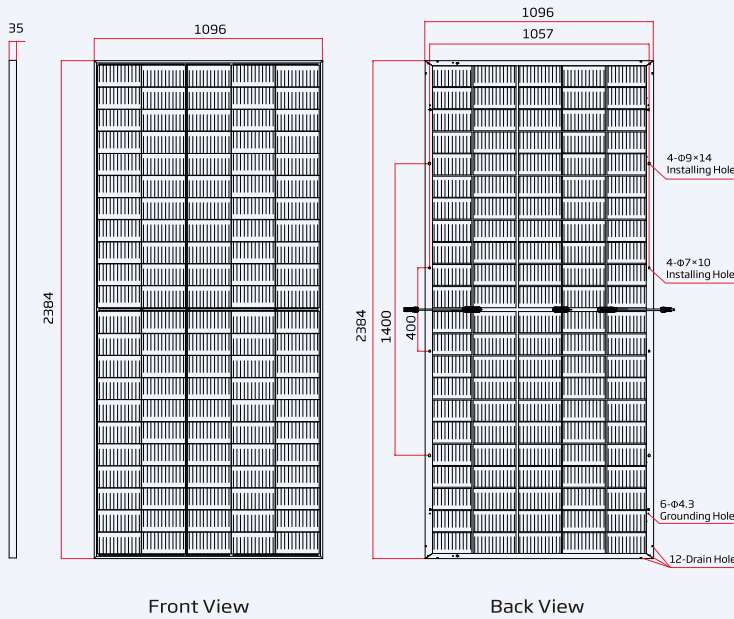
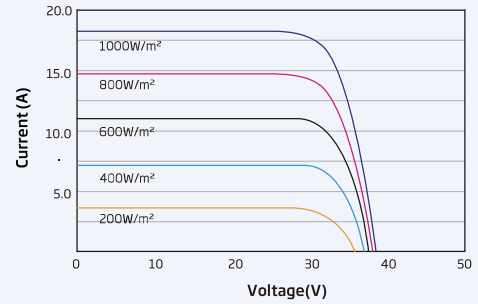
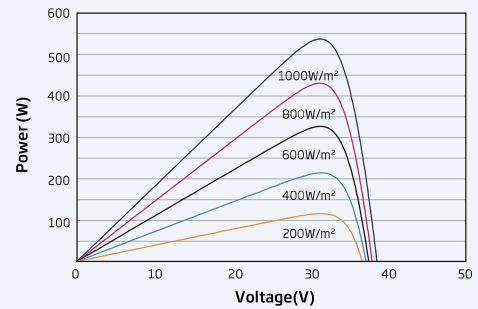


**Comprehensive Products and System Certificates**



IEC61215/IEC61730/IEC61701/IEC62716/UL61730  
 ISO 9001: Quality Management System  
 ISO 14001: Environmental Management System  
 ISO14064: Greenhouse Gases Emissions Verification  
 ISO45001: Occupational Health and Safety Management System



**DIMENSIONS OF PV MODULE(mm)**

**I-V CURVES OF PV MODULE (540 W)**

**P-V CURVES OF PV MODULE(540 W)**

**ELECTRICAL DATA (STC)**

Peak Power Watts -P <sub>MAX</sub> (Wp)*	525	530	535	540	545	550
Power Tolerance -P <sub>MAX</sub> (W)	0 ~ +5					
Maximum Power Voltage -V <sub>MPP</sub> (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current -I <sub>MPP</sub> (A)	17.04	17.11	17.16	17.21	17.24	17.29
Open Circuit Voltage -V <sub>OC</sub> (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current -I <sub>SC</sub> (A)	18.14	18.19	18.24	18.30	18.35	18.39
Module Efficiency η <sub>m</sub> (%)	20.1	20.3	20.5	20.7	20.9	21.0

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Measuring tolerance: ±3%.

**Electrical characteristics with different power bin (reference to 10% Irradiance ratio)\*\***

Total Equivalent power -P <sub>MAX</sub> (Wp)	562	567	573	578	583	589
Maximum Power Voltage -V <sub>MPP</sub> (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current -I <sub>MPP</sub> (A)	18.23	18.31	18.36	18.41	18.45	18.50
Open Circuit Voltage -V <sub>OC</sub> (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current -I <sub>SC</sub> (A)	19.41	19.46	19.52	19.58	19.63	19.68
Irradiance ratio (rear/front)	10%					

Power Bifaciality: 70±5%.

**ELECTRICAL DATA (NOCT)**

Maximum Power -P <sub>MAX</sub> (Wp)	398	401	405	409	413	416
Maximum Power Voltage -V <sub>MPP</sub> (V)	28.6	28.8	29.0	29.2	29.4	29.5
Maximum Power Current -I <sub>MPP</sub> (A)	13.88	13.93	13.97	14.02	14.08	14.10
Open Circuit Voltage -V <sub>OC</sub> (V)	35.0	35.1	35.3	35.5	35.7	35.9
Short Circuit Current -I <sub>SC</sub> (A)	14.62	14.66	14.70	14.75	14.79	14.82

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

**MECHANICAL DATA**

Solar Cells	Monocrystalline 210mm PERC
No. of cells	110 cells
Module Dimensions	2384×1096×35 mm (93.86×43.15×1.38 inches)
Weight	32.6 kg (71.9 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm (1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4,0mm <sup>2</sup> (0,006 inches <sup>2</sup> ), Portrait: 280/280 mm (11.02/11.02 inches) Landscape: 1400/1400 mm (55.12/55.12 inches)
Connector	Trina TS4*/MC4 EV02

\*Please specify connector on your order

**TEMPERATURE RATINGS**

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P <sub>MAX</sub>	-0.34%/°C
Temperature Coefficient of V <sub>OC</sub>	-0.25%/°C
Temperature Coefficient of I <sub>SC</sub>	0.04%/°C

**MAXIMUM RATINGS**

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	35A

**WARRANTY**

- 12 year Product Workmanship Warranty
- 30 year Power Warranty
- 2% first year degradation
- 0.45% Annual Power Attenuation

(Please refer to product warranty for details)

**PACKAGING CONFIGURATION**

- Modules per box: 31 pieces
- Modules per 40' container: 527 pieces

\*\* Back-side power gain varies depending upon the specific project albedo

# SG125HV

## String Inverter for 1500 Vdc System



### HIGH YIELD

- Patented five-level topology, max. efficiency 98.9 %, European efficiency 98.7 %, CEC efficiency 98.5 %
- Full power operation without derating at 50 °C
- Patented anti-PID function

### EASY O&M

- Virtual central solution, easy for O&M
- Compact design and light weight for easy installation

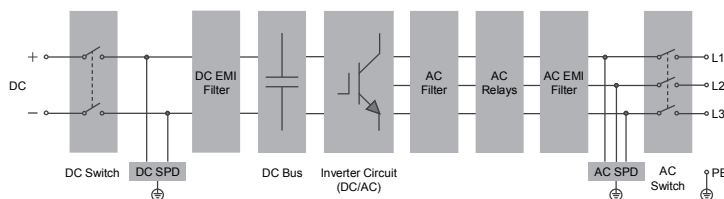
### SAVED INVESTMENT

- DC 1500V, AC 600V, low system initial investment
- 1 to 5MW power block design for lower AC transformer and labor cost
- Max.DC/AC ratio up to 1.5

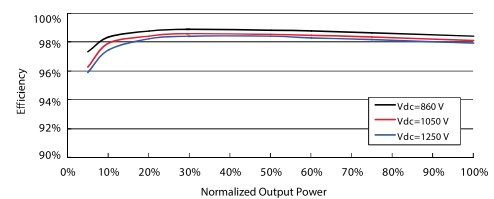
### GRID SUPPORT

- Compliance with both IEC and UL safety, EMC and grid support regulations
- Low/High voltage ride through(L/HVRT)
- Active & reactive power control and power ramp rate control

### CIRCUIT DIAGRAM



### EFFICIENCY CURVE





Type designation	SG125HV
<b>Input (DC)</b>	
Max. PV input voltage	1500 V
Min. PV input voltage / Start-up input voltage	860 V / 920 V
Nominal PV input voltage	1050 V
MPP voltage range	860 – 1450 V
MPP voltage range for nominal power	860 – 1250 V
No. of independent MPP inputs	1
No. of DC inputs	1
Max. PV input current	148 A
Max. DC short-circuit current	250 A
<b>Output (AC)</b>	
AC output power	125 kVA @ 50 °C
Max. AC output current	120 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 – 690 V
Nominal grid frequency / Grid frequency range	50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
THD	< 3 % (at nominal power)
DC current injection	< 0.5 % I <sub>n</sub>
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / connection phases	3 / 3
<b>Efficiency</b>	
Max. efficiency / European efficiency	98.9% / 98.7%
CEC efficiency	98.5%
<b>Protection</b>	
DC reverse connection protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Grid monitoring	Yes
DC switch	Yes
AC switch	Yes
Q at night function	optional
Anti-PID function	Yes
Overvoltage protection	DC Type II / AC Type II
<b>General Data</b>	
Dimensions (W*H*D)	670*902*296 mm 26.4"*35.5"*11.7"
Weight	76 kg 167.5 lb
Isolation method	Transformerless
Degree of protection	IP 65 NEMA 4X
Night power consumption	< 4 W
Operating ambient temperature range	-30 to 60 °C (> 50 °C derating) -22 to 140 °F (> 122 °F derating)
Allowable relative humidity range (non-condensing)	0 – 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m (> 3000 m derating) 13123 ft (> 9843 ft derating)
Display / Communication	LED, Bluetooth+APP / RS485
DC connection type	OT or DT terminal (Max. 185 mm <sup>2</sup> 350 Kcmil)
AC connection type	OT or DT terminal (Max. 185 mm <sup>2</sup> 350 Kcmil)
Compliance	UL1741, UL1741SA, IEEEl547, IEEEl547.1, CSA C22.2 107.1-01-2001, FCC Part15 Sub-part B Class A Limits, California Rule 21, IEC 62109-1/-2, IEC 61000-6-2/-4, IEC 61727, IEC62116, BDEW, EN50549,VDE-AR-N 4110:2018, VDE-AR-N 4120:2018, UNE 206007-1:2013, P.O.12.3, UTE C15-712-1:2013, CEI 0-16:2017, IEC 61683, PEA, NTCO
Grid Support	LVRT, HVRT, ZVRT, active & reactive power regulation, PF control, soft start/ stop





中国认可  
检测  
TESTING  
CNAS L0599

## Test Report

REPORT No.: SHE21-01442/1      DATE RECEIVED: 2021/02/24  
 ATTENTION: Ya XIAO      ANALYSIS DATE: 2021/02/24~2021/03/10  
 CUSTOMER: Trina Solar Co., Ltd.      DATE REPORTED: 2021/03/10  
 No.2 TianHe Road, Trina PV  
 Industrial Park, New District,  
 Changzhou City, Jiangsu Province  
 213031      SAMPLE (S): Solid waste (1)  
 REFERENCE: -

### REMARKS

- 1.The results apply to the sample(s) as received
- 2.The report is translated from SHE21-01442.

Edited by: 周敏  
Min ZHOU

Reviewed by: 孟俊  
Jun MENG

Approved by: 王红婄  
Honglou WANG



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4. The test report is invalid if altered.
5. The test report has been drafted in Chinese and translated into English (if applicable) for convenience only. In the event of discrepancy, the Chinese version shall prevail.
6. Should you have any queries or objection to the test report, please contact us within 10 days after receiving the report.

### Legend

NA The sample was not analysed for this analyte

↑ Detection limit raised

↓ Detection limit lowered

ND Not Detected



## INORGANIC & ORGANIC ANALYSIS

Report No.: SHE21-01442/1

Customer Reference: -

Lab ID	SHE21-01442.001
Customer ID	TSM-530DEG19C.20
Order No	SHES2102003321TX
Serial No	A08210100400137
Date Received	2021/02/24

TCLP ITEM	METHOD	MDL	UNIT	Limit	Solid waste
Arsenic (As)	USEPA 200.8-1994	0.050	mg/L	≤5	<0.050
Barium (Ba)	USEPA 200.8-1994	0.010	mg/L	≤100	<b>0.195</b>
Cadmium (Cd)	USEPA 200.8-1994	0.001	mg/L	≤1	<0.001
Chromium (Cr)	USEPA 200.8-1994	0.010	mg/L	≤5	<0.010
Lead (Pb)	USEPA 200.8-1994	0.010	mg/L	≤5	<0.010
Selenium (Se)	USEPA 200.8-1994	0.050	mg/L	≤1	<0.050
Silver (Ag)	USEPA 200.8-1994	0.010	mg/L	≤5	<0.010
Mercury (Hg)	USEPA 7473-2007	0.005	mg/L	≤0.2	<0.005
2,4-D	USEPA 8151A-1996	0.0005	mg/L	≤10	<0.0005
2,4,5-TP (Silvex, Fenopop)	USEPA 8151A-1996	0.0005	mg/L	≤1	<0.0005
Benzene	USEPA 8260D-2018	0.0005	mg/L	≤0.5	<0.0005
Carbon tetrachloride	USEPA 8260D-2018	0.0005	mg/L	≤0.5	<0.0005
Chlorobenzene	USEPA 8260D-2018	0.0005	mg/L	≤100	<0.0005
Chloroform	USEPA 8260D-2018	0.0005	mg/L	≤6	<0.0005
1,4-Dichlorobenzene	USEPA 8260D-2018	0.0005	mg/L	≤7.5	<0.0005
1,2-Dichloroethane	USEPA 8260D-2018	0.0005	mg/L	≤0.5	<0.0005
1,1-Dichloroethene	USEPA 8260D-2018	0.0005	mg/L	≤0.7	<0.0005
2-butanone(MEK)	USEPA 8260D-2018	0.020	mg/L	≤200	<0.020
Tetrachloroethene	USEPA 8260D-2018	0.0005	mg/L	≤0.7	<0.0005
Trichloroethene	USEPA 8260D-2018	0.0005	mg/L	≤0.5	<0.0005
Vinyl chloride	USEPA 8260D-2018	0.0005	mg/L	≤0.2	<0.0005
2,4-Dinitrotoluene	USEPA 8270E-2018	0.0005	mg/L	≤0.13	<0.0005
Hexachlorobenzene	USEPA 8270E-2018	0.0005	mg/L	≤0.13	<0.0005
Hexachlorobutadiene	USEPA 8270E-2018	0.0005	mg/L	≤0.5	<0.0005



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## INORGANIC & ORGANIC ANALYSIS

Report No.: SHE21-01442/1

Customer Reference: -

Lab ID	SHE21-01442.001
Customer ID	TSM-530DEG19C.20
Order No	SHES2102003321TX
Serial No	A08210100400137
Date Received	2021/02/24

TCLP ITEM	METHOD	MDL	UNIT	Limit	Solid waste
Hexachloroethane	USEPA 8270E-2018	0.0005	mg/L	≤3	<0.0005
Nitrobenzene	USEPA 8270E-2018	0.0005	mg/L	≤2	<0.0005
Pentachlorophenol	USEPA 8270E-2018	0.0025	mg/L	≤100	<0.0025
Pyridine	USEPA 8270E-2018	0.002	mg/L	≤5.0	<0.002
2,4,5-Trichlorophenol	USEPA 8270E-2018	0.0005	mg/L	≤400	<0.0005
2,4,6-Trichlorophenol	USEPA 8270E-2018	0.0005	mg/L	≤2	<0.0005
Methylphenol	USEPA 8270E-2018	0.001	mg/L	≤200	<0.001
2-Methylphenol	USEPA 8270E-2018	0.0005	mg/L	≤200	<0.0005
3&4-Methylphenol	USEPA 8270E-2018	0.0005	mg/L	≤200	<0.0005
Endrin	USEPA 8270E-2018	0.0005	mg/L	≤0.02	<0.0005
γ-BHC	USEPA 8270E-2018	0.0005	mg/L	≤0.4	<0.0005
Toxaphene	USEPA 8270E-2018	0.050	mg/L	≤0.5	<0.050
Methoxychlor	USEPA 8270E-2018	0.0005	mg/L	≤10	<0.0005
Heptachlor	USEPA 8270E-2018	0.0005	mg/L	≤0.008	<0.0005
Chlordane(Total)	USEPA 8270E-2018	0.001	mg/L	≤0.03	<0.001

Remark:

- 1.Preparative method:USEPA1311-1992(Toxicity Characteristic Leaching Procedure)
- 2.The Limits comes from CFR(code of federal regulations) title 40 part 261.24.



## Method List

USEPA 200.8-1994 Metals ICP-MS  
 USEPA 7473-2007 Metals-Hg  
 USEPA 8151A-1996 Acid Herbicides in Water by GC-MS  
 USEPA 8260D-2018 VOCs  
 USEPA 8270E-2018 SVOCs

## Equipment Information

### Method:USEPA 200.8-1994

Equipment Name	Model	Equipment Number	Serial Number
ICP-MS	Agilent 7900	CHEM-998	JP16311502

### Method:USEPA 7473-2007

Equipment Name	Model	Equipment Number	Serial Number
Hg analyzer	Milestone DMA-80	CHEM-958	16041979

### Method:USEPA 8151A-1996

Equipment Name	Model	Equipment Number	Serial Number
GC-MS	Agilent 7890A/5975C	CHEM-ENV085	CN12371032/US12362A17

### Method:USEPA 8260D-2018

Equipment Name	Model	Equipment Number	Serial Number
PT-GC-MS	AQUATEk100&Agilent7890B/5975A	CHEM-937	US15240014/CN15423234/US1541L452

### Method:USEPA 8270E-2018

Equipment Name	Model	Equipment Number	Serial Number
GC-MS	Agilent 7890B/5977B	CHEM-1175	CN18293008/US1824R018

### Method:USEPA 8270E-2018

Equipment Name	Model	Equipment Number	Serial Number
GC-MS	Agilent 7890B/5977B	CHEM-1175	CN18293008/US1824R018



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## APPENDIX 1

Report No.:SHE21-01442/1

Customer Reference: -

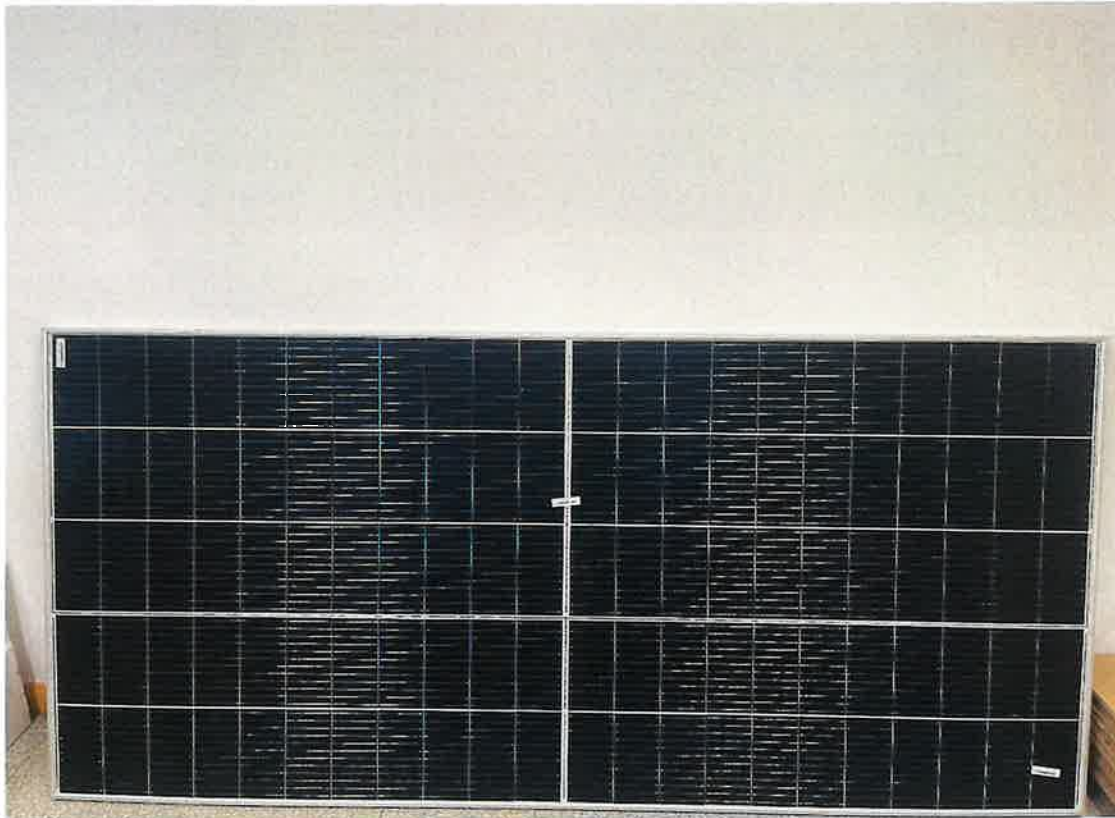




## APPENDIX 2

Report No.:SHE21-01442/1

Customer Reference: -



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## APPENDIX 3

Report No.:SHE21-01442/1

Customer Reference: -



\*\*\*End of report\*\*\*

