



Mono Crystalline Half 144 Cells

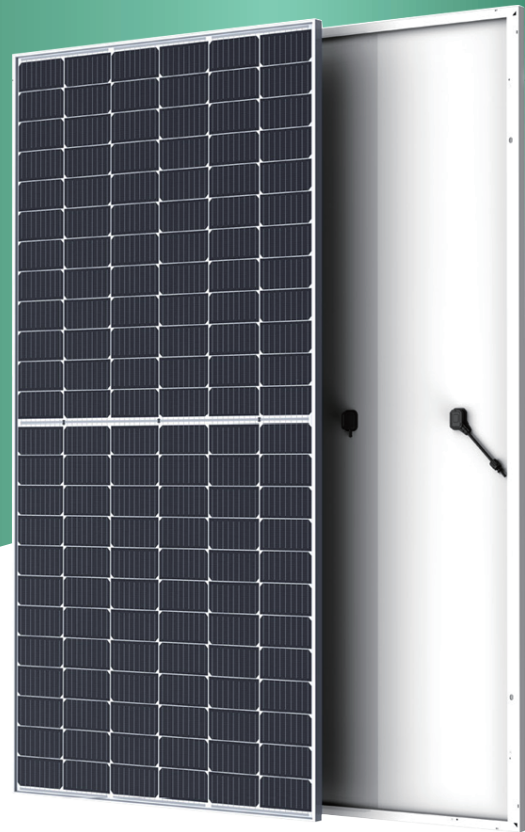
525-555 watt

HALF-CELL MONO MODULE

Positive power tolerance of 0~+3%

ISO9001:2015 ISO14001:2015

IEC61215/IEC61730



10 Busbar Solar Cell

10 busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



High Efficiency

Higher module conversion efficiency (up to 21.30%) benefit from half cell structure (low resistance characteristic).



PID Resistance

Excellent Anti-PID performance guarantee limited power degradation for mass production.



Low-light Performance

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



Severe Weather Resilience

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

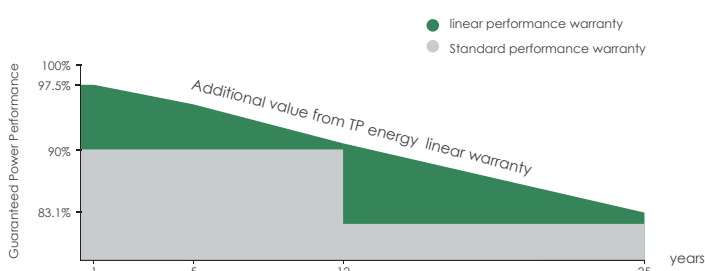


Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV Rheinland.

► Superior Warranty

TP ENERGY SOLAR PERFORMANCE WARRANTY



► Comprehensive Certificates

IEC61215/IEC61730/IEC61701/IEC62716

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

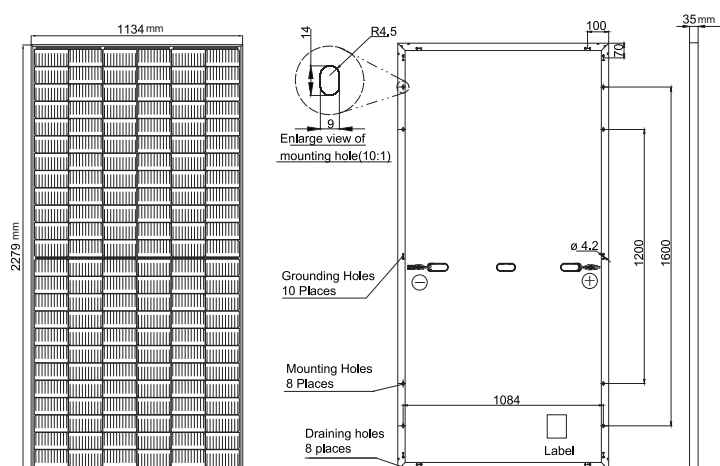
ISO14064: Greenhouse Gases Emissions Verification

OHSAS 18001: Occupation Health and Safety

Management System



► DIMENSIONS OF PV MODULE(mm)



► MECHANICAL DIAGRAMS

Cell Type	Mono PERC 182x91mm
No. of cells	6x12x2
Dimensions	2279x1134x35mm
Weight	28.6kg
Front Glass	3.2mm, Anti-Reflection, Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
J-Box	IP68 Rated
Output Cables	TÜV 1x4.0mm ² Length 300+/400-(mm) length can be customized

► Electrical Characteristics

Module Type	TP144-525M/MB-8		TP144-530M/MB-8		TP144-535M/MB-8		TP144-540M/MB-8		TP144-545M/MB-8		TP144-550M/MB-8		TP144-555M/MB-8	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	525Wp	397Wp	530Wp	401Wp	535Wp	405Wp	540Wp	408Wp	545Wp	412Wp	550Wp	416Wp	555Wp	420Wp
Maximum Power Voltage (Vmp)	41.15V	38.36V	41.31V	38.57V	41.47V	38.78V	41.64V	38.99V	41.80V	39.20V	41.96V	39.43V	42.13V	39.64V
Maximum Power Current (Imp)	12.76A	10.35A	12.83A	10.39A	12.90A	10.43A	12.97A	10.47A	13.04A	10.51A	13.11A	10.55A	13.18A	10.59A
Open-circuit Voltage (Voc)	49.30V	46.05V	49.37V	46.18V	49.45V	46.31V	49.60V	46.43V	49.75V	46.55V	49.82V	46.68V	49.90V	46.90V
Short-circuit Current (Isc)	13.72A	10.97A	13.75A	11.01A	13.79A	11.05A	13.86A	11.09A	13.93A	11.13A	13.96A	11.17A	14.00A	11.21A
Module Efficiency STC (%)	20.30%		20.50%		20.70%		20.90%		21.10%		21.30%		21.50%	

► Temperature Ratings

NMOT (Nominal Module Operating Temperature)	45°C (±2°C)
Temperature Coefficient of Pmax	- 0.37%/°C
Temperature Coefficient of Voc	- 0.286%/°C
Temperature Coefficient of Isc	0.057%/°C

► Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1000/1500VDC (IEC)
Max Series Fuse Rating	25A

► Warranty

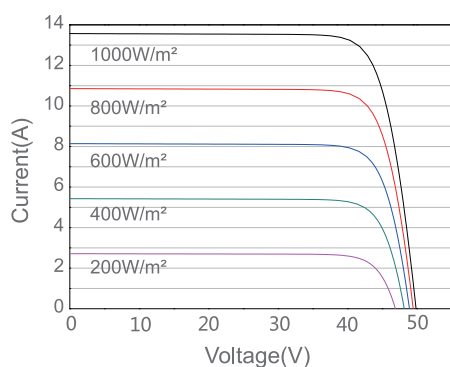
12 Years Product Workmanship Warranty
25 Years Power Warranty

► Packaging Configuration

Modules per pallet:	31pcs
Modules per 40HQ container	620pcs

► I-V-Curve

Current-Voltage Curve (TP144-540M/MB-8)



Power-Voltage Curve (TP144-540M/MB-8)

