

MT5-Pro

580-600W

N-type TOPCon Solar Module

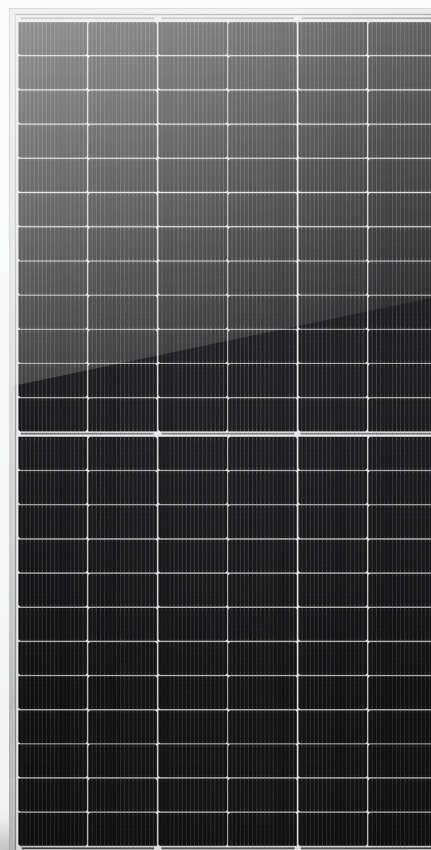
Qualidade Garantida

25-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output

23.22%

Max. Module Efficiency



MS-72H

10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.

ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation.

Higher Reliability

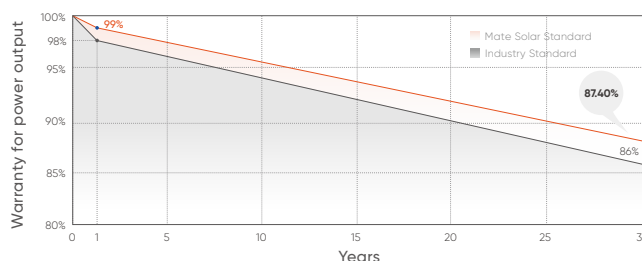
Adopted Mate Solar latest S-TOPCo 2.0 technology,
No polysilicon wrap around, Full electrical isolation,
Zero leakage current; Much Safer for roof.

Better Weak Illumination Response

Higher power output even under low-light environments like on cloudy or foggy days.

Better Temperature Coefficient

Higher power generation under working conditions, thanks to passivating contact cell technology.



* Please refer to Mate Solar standard warranty for details

Quality Management System And Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt).

IEC62716 (Ammonia), IEC60068-2-68(Sand).

ISO 9001:2015/quality management system.

ISO 14001:2015/environmental management system.

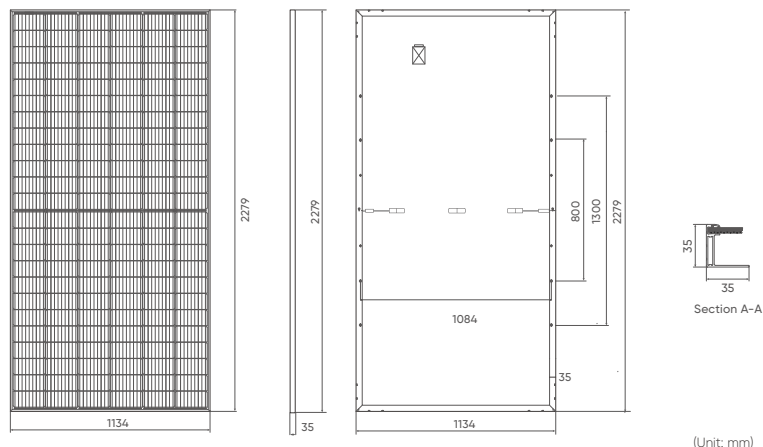
ISO 45001:2018/occupation health safety management system

ISO 50001:2011/energy management system.

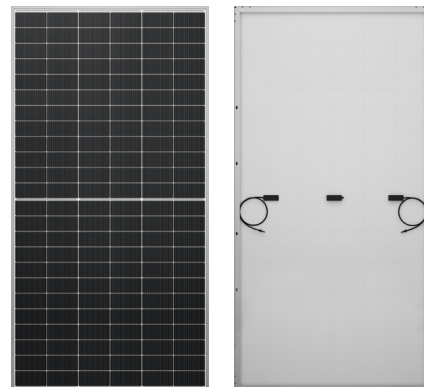
IEC TS 62941-2016/PV industry quality management system .



Drawings



Product Image



Mechanical Parameters

Solar Cells	N-type Mono
No. of Cells	144 (6×24)
Dimensions	2279 × 1134 × 30mm
Weight	27.5kg
Front Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4mm ² , 300mm (+) / 300mm (-), Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa
Packaging	36pcs/box, 180pcs/20'GP, 720pcs/40'HQ

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	25A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.30%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C

Electrical Characteristics (STC*)

Module Type: MS-72H	580	585	590	595	600
Maximum power (Pmax/W)	580	585	590	595	600
Open Circuit Voltage (Voc/V)	52.31	52.47	52.63	52.79	52.95
Short Circuit Current (Isc/A)	14.01	14.07	14.13	14.19	14.25
Voltage at Maximum power (Vmpp/V)	43.35	43.53	43.71	43.88	44.06
Current Maximum Power (Imp/A)	13.38	13.44	13.50	13.56	13.62
MODULE EFFICIENCY (%)	22.44	22.64	22.83	23.02	23.22

Electrical Characteristics (NMOT*)

Maximum Power: Pmax [W]	437	441	445	449	453
Open Circuit Voltage: Voc [V]	49.69	49.84	49.99	50.14	50.29
Short Circuit Current: Isc [A]	11.31	11.36	11.41	11.46	11.51
Voltage at Maximum Power: Vmp [V]	40.7	40.86	41.05	41.27	41.45
Current at Maximum Power: Imp [A]	10.74	10.79	10.83	10.88	10.93

- Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
- Nominal Module Operating Temperature (NMOT): Irradiance 800W/m²; wind speed 1m/s, ambient temperature 20°C.
- Tolerance of Pm: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: ±3%.

I-V CURVE

