

MT5-Pro

530-550W

N-type TOPCon Solar Module

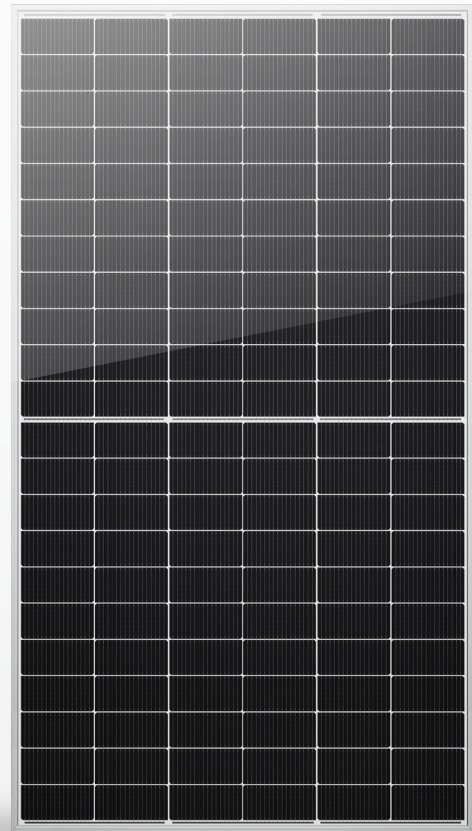
Qualidade Garantida

25-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output

23.16%

Max. Module Efficiency



MS-66H

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

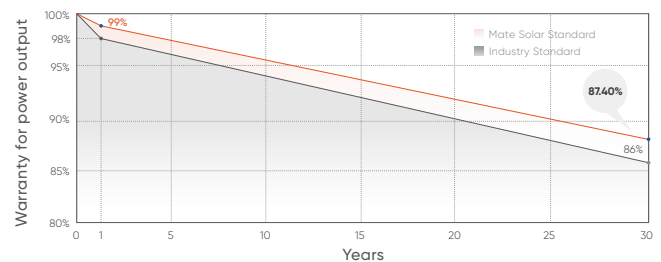
Adopted Mate Solar latest S-TOPCo 2.0 technology,
No polysilicon wrap around, Full electrical isolation,
Zero leakage current; Much Safer for roof.

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.

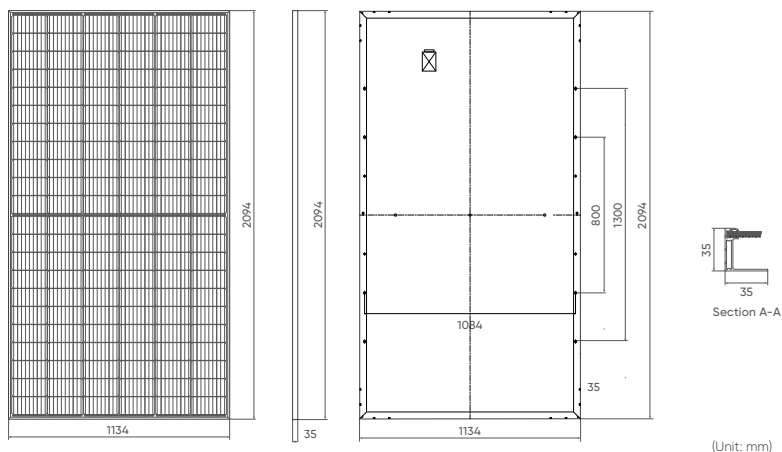
ISO 45001:2018/occupation health safety management system

ISO 50001:2011/energy management system.

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



Drawings



Mechanical Parameters

Solar Cells	N-type Mono
No. of Cells	132 (6×22)
Dimensions	2094 × 1134 × 30mm
Weight	25.5kg
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, 792pcs/40'HQ

Electrical Characteristics (STC*)

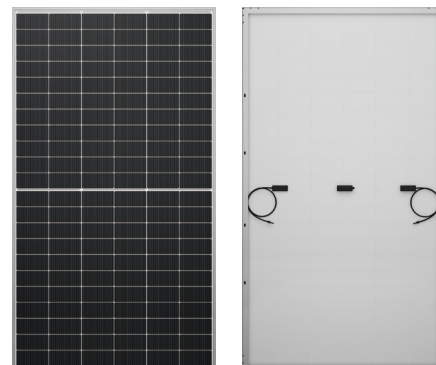
Module Type: MS-66H	530	535	540	545	550
Maximum power (P _{max} /W)	530	535	540	545	550
Open Circuit Voltage (V _{oc} /V)	47.82	47.97	48.12	48.27	48.42
Short Circuit Current (I _{sc} /A)	13.97	14.03	14.09	14.16	14.23
Voltage at Maximum power (V _{mpp} /V)	39.76	39.96	40.15	40.35	40.54
Current Maximum Power (I _{mpp} /A)	13.33	13.39	13.45	13.51	13.57
MODULE EFFICIENCY (%)	22.32	22.53	22.74	22.95	23.16

Electrical Characteristics (NMOT*)

Maximum Power: P _{max} [W]	399	403	407	411	415
Open Circuit Voltage: V _{oc} [V]	45.61	45.76	45.91	46.06	46.21
Short Circuit Current: I _{sc} [A]	11.19	11.25	11.31	11.37	11.43
Voltage at Maximum Power: V _{mp} [V]	37.26	37.42	37.59	37.75	37.9
Current at Maximum Power: I _{mp} [A]	10.71	10.77	10.83	10.89	10.95

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
 2. Nominal Module Operating Temperature (NMOT): Irradiance 800W/m²; wind speed 1m/s, ambient temperature 20°C.
 3. Tolerance of P_m: 0~+5W, Measuring uncertainty of power: ±3%. Performance deviation of V_{oc} [V], I_{sc} [A], V_m [V] and I_m [A]: ±3%.

Product Image



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 P _{max}	-0.30%/°C
Temperature Coefficient of V _{oc}	-0.25%/°C
Temperature Coefficient of I _{sc}	+0.046%/°C

I-V CURVE

