

MT5-Pro

525-545W

N-type TOPCon Full Black
Bifacial Dual Glass Solar Module

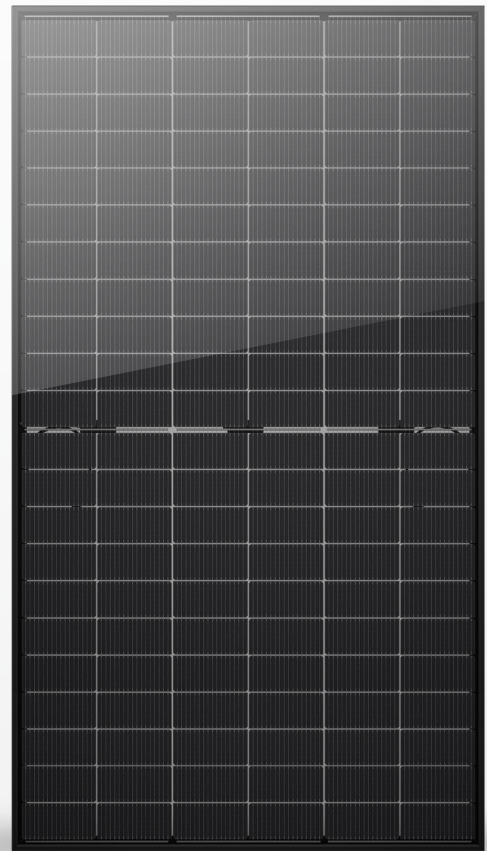
Qualidade Garantida

25-Year Warranty for Materials and Processing

30-Year Warranty for Extra Linear Power Output

22.95%

Max. Module Efficiency



MS-66HB

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

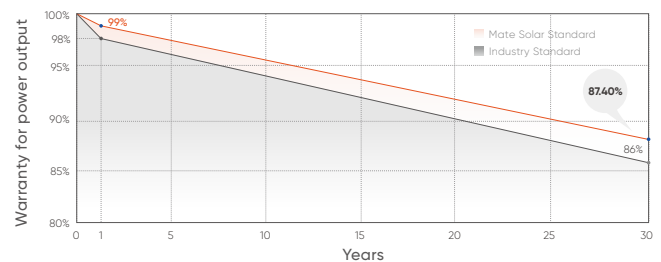
Adopted Mate Solar latest S-TOPCo 2.0 technology,
No polysilicon wrap around, Full electrical isolation,
Zero leakage current; Much Safer for roof.

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.

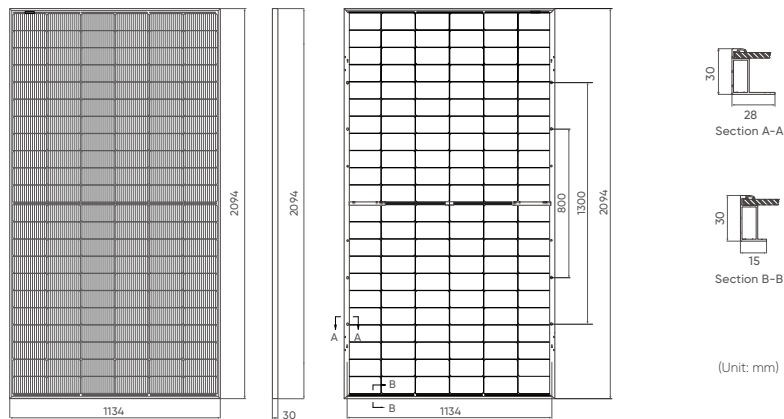
ISO 45001:2018/occupation health safety management system

ISO 50001:2011/energy management system.

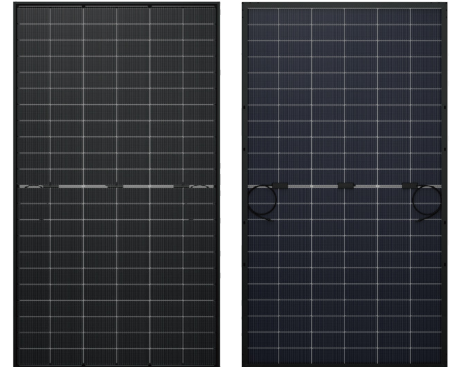
IEC TS 62941-2016/PV industry quality management system .



Drawings



Product Image



Mechanical Parameters

Solar Cells	N-type Mono
No. of Cells	132 (6×22)
Dimensions	2094 x 1134 x 30mm
Weight	28.5kg
Glass	Front: 2.0mm coated semi-tempered glass; Back: 2.0mm semi-tempered glass
Frame	Black 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

Operating Characteristics

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0/+5W

Temperature Characteristics

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C

Electrical Characteristics (STC*)

Module Type: MS-66HB	525	530	535	540	545
Maximum power (Pmax/W)	525	530	535	540	545
Open Circuit Voltage (Voc/V)	47.67	47.82	47.97	48.12	48.27
Short Circuit Current (Isc/A)	13.93	13.97	14.03	14.09	14.16
Voltage at Maximum power (Vmpp/V)	39.57	39.76	39.96	40.15	40.35
Current Maximum Power (Impp/A)	13.27	13.33	13.39	13.45	13.51
MODULE EFFICIENCY (%)	22.11	22.32	22.53	22.74	22.95

Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax/W)	551	557	562	567	572
	Module Efficiency STC (%)	23.21	23.44	23.66	23.88	24.10
15%	Maximum Power (Pmax/W)	604	610	615	621	627
	Module Efficiency STC (%)	25.43	25.67	25.91	26.15	26.39
25%	Maximum Power (Pmax/W)	656	663	669	675	681
	Module Efficiency STC (%)	27.64	27.90	28.16	28.43	28.69

1. Standard Test Conditions [STC]: irradiance 1000W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
 2. 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

