

# MT5-Pro

# 575-595W

N-type TOPCon Full Black  
Bifacial Dual Glass Solar Module

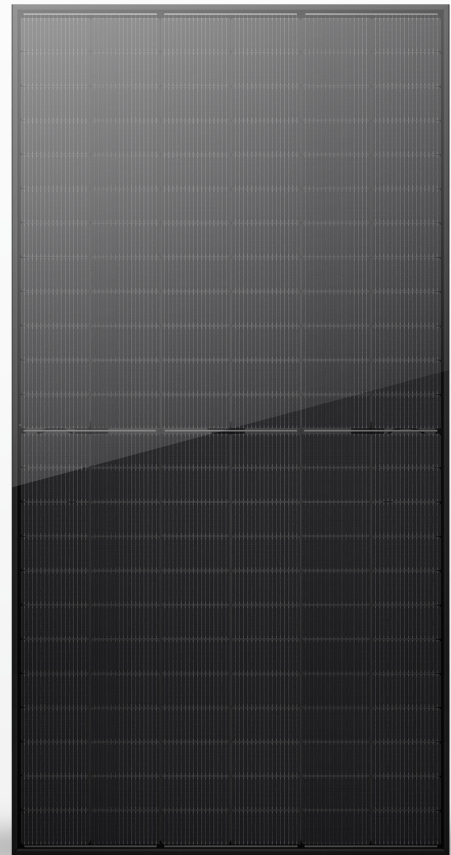
## Qualidade Garantida

**25-Year** Warranty for Materials and Processing

**30-Year** Warranty for Extra Linear Power Output

23.02%

Max. Module Efficiency



MS-72HB

## 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

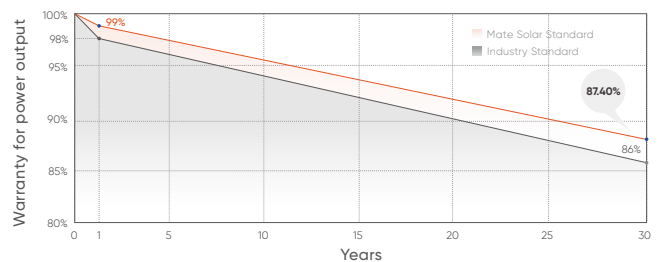
Adopted Mate Solar latest S-TOPCo 2.0 technology,  
No polysilicon wrap around, Full electrical isolation,  
Zero leakage current; Much Safer for roof.

## 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.

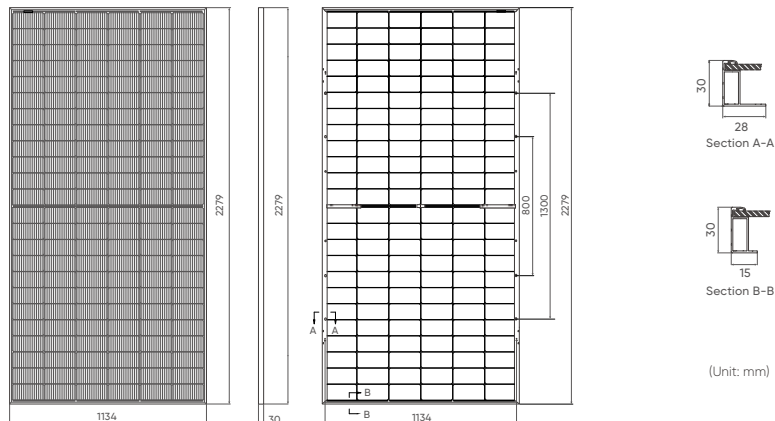
ISO 45001:2018/occupation health safety management system

ISO 50001:2011/energy management system.

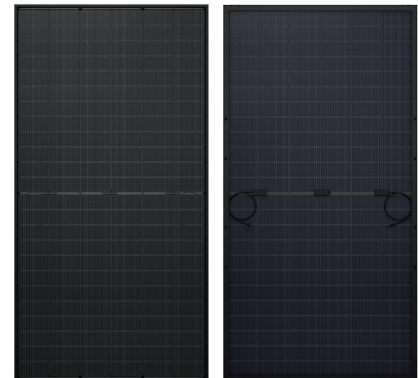
IEC TS 62941-2016/PV industry quality management system .



## Drawings



## Product Image



## Mechanical Parameters

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| Solar Cells          | N-type Mono                                                              |
| No. of Cells         | 144 (6×24)                                                               |
| Dimensions           | 2279 x 1134 x 30mm                                                       |
| Weight               | 31.5kg                                                                   |
| 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 <sup>2</sup> , 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   | 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-72HB              | 575   | 580   | 585   | 590   | 595   |
| Maximum power (Pmax/W)            | 575   | 580   | 585   | 590   | 595   |
| Open Circuit Voltage (Voc/V)      | 52.15 | 52.31 | 52.47 | 52.63 | 52.79 |
| Short Circuit Current (Isc/A)     | 13.95 | 14.01 | 14.07 | 14.13 | 14.19 |
| Voltage at Maximum power (Vmpp/V) | 43.17 | 43.35 | 43.53 | 43.71 | 43.88 |
| Current Maximum Power (Impp/A)    | 13.32 | 13.38 | 13.44 | 13.50 | 13.56 |
| MODULE EFFICIENCY (%)             | 22.25 | 22.44 | 22.64 | 22.83 | 23.02 |

## Bifacial Output-Rearside Power Gain

|     |                           |       |       |       |       |       |
|-----|---------------------------|-------|-------|-------|-------|-------|
| 5%  | Maximum Power (Pmax/W)    | 604   | 609   | 614   | 620   | 625   |
|     | Module Efficiency STC (%) | 23.36 | 23.56 | 23.77 | 23.97 | 24.17 |
| 15% | Maximum Power (Pmax/W)    | 661   | 667   | 673   | 679   | 684   |
|     | Module Efficiency STC (%) | 25.59 | 25.81 | 26.03 | 26.25 | 26.48 |
| 25% | Maximum Power (Pmax/W)    | 719   | 725   | 731   | 738   | 744   |
|     | Module Efficiency STC (%) | 27.81 | 28.05 | 28.29 | 28.54 | 28.78 |

1. Standard Test Conditions [STC]: irradiance 1000W/m<sup>2</sup>; 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

