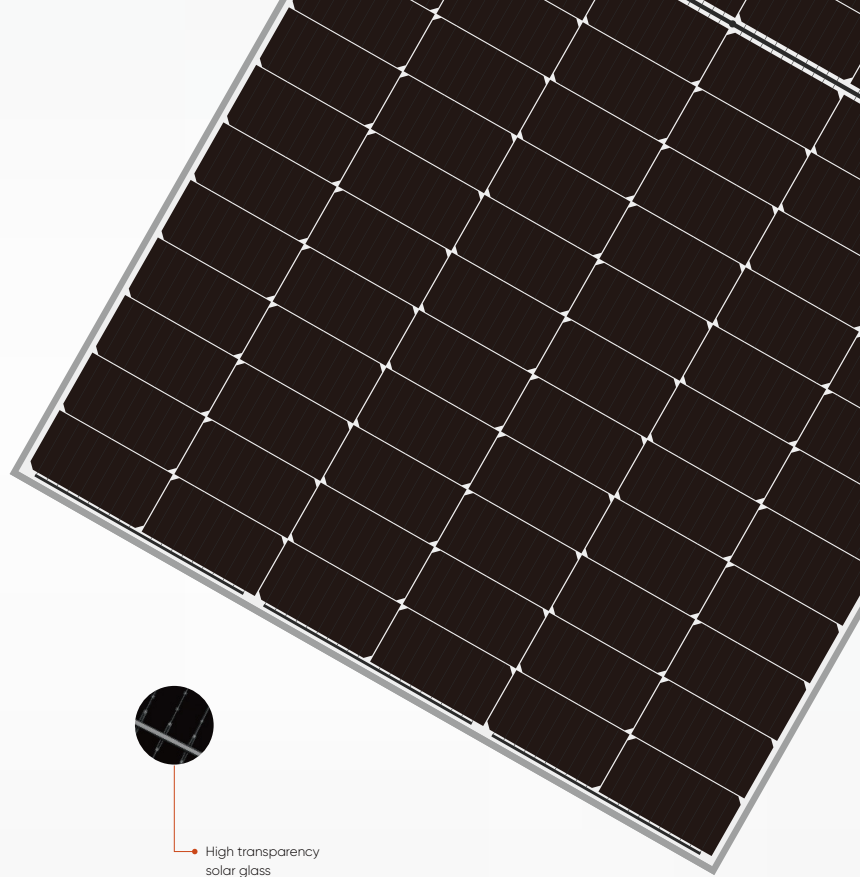


MT5 485-510W

MS505M-66H

PERC MBB Half Cell
Monocrystalline Module



High transparency
solar glass

Features

High Power up to 510W

Large area cells based on 182mm silicon wafers,
High module efficiency with high density interconnect technology

High Energy Yield

Up to 21.48% additional power gain from back side,
Excellent low irradiation performance

High Reliability

Resistant to harsh environments such as salt, ammonia, sand,
high temperature and high humidity areas

High Customer Value

Lowest guaranteed first year and annual degradation,
Compatible with existing mainstream system components



WEB

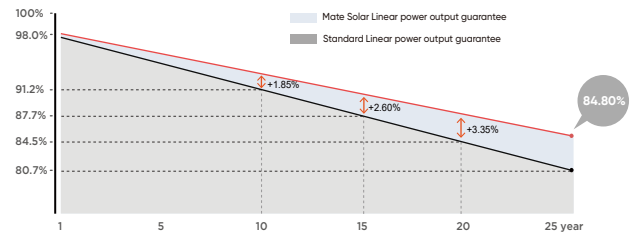


WECHAT

Quality Guarantee

12-Year Warranty for Materials and Processing

25-Year Warranty for Extra Linear Power Output



* Please refer to Mate Solar standard warranty for details

Certifications

IEC 61215, IEC 61730, UL 61730

ISO 9001: 2015: ISO Quality Management System

ISO 14001: 2015: ISO Environment Management System

ISO 45001: 2018: Occupational Health and Safety

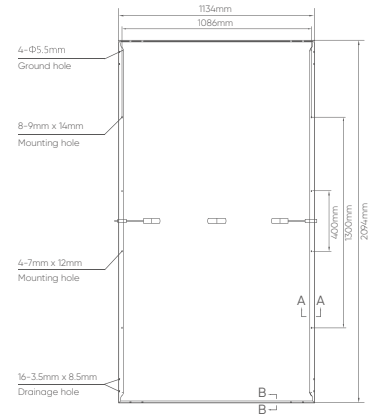


Mechanical Data

Number of Cells	132 Cells (6x22)
Dimensions of Module L*W*H	2094 x 1134 x 35mm
Weight	25.5kg
Front Side Glass	High transparency solar glass 3.2mm
Backsheet	White
Frame	Black/Silver, anodized aluminium alloy
Junction Box	IP68 Rated, 3 Diodes
Cable	4.0mm ² , Portrait: 300mm / Landscape: 1400mm
Wind/Snow Load	2400Pa/5400Pa
Connector	MC Compatible

* Please check the installation manual for more details

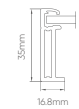
Module Dimension



Back View



A-A



B-B

Electrical Specification (STC*)

Maximum Power (Pmax/W)	485	490	495	500	505	510
Maximum Power Voltage (Vmp/V)	40.08	40.22	40.36	40.50	40.64	40.78
Maximum Power Current (Imp/A)	12.11	12.19	12.27	12.35	12.43	12.51
Open Circuit Voltage (Voc/V)	48.34	48.46	48.58	48.70	48.82	48.94
Short Circuit Current (Isc/A)	12.99	13.06	13.13	13.20	13.27	13.34
Module Efficiency (%)	20.43	20.64	20.85	21.06	21.27	21.48
Power Output Tolerance (W)	0~+5					

* STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25°C, Spectra at AM1.5

Electrical Specification (NMOT*)

Maximum Power (Pmax / W)	365	369	373	377	381	385
Maximum Power Voltage (Vmp / V)	36.76	36.95	37.14	37.33	37.52	37.71
Maximum Power Current (Imp / A)	9.93	9.99	10.05	10.10	10.16	10.21
Open Circuit Voltage (VOC / V)	44.93	45.05	45.17	45.29	45.41	45.53
Short Circuit Current (Isc / A)	10.55	10.61	10.67	10.73	10.79	10.85

* Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

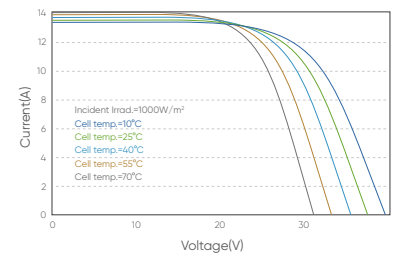
Packaging Configuration

Module per Box	31 pieces
Module per 40' Container	682 pieces

Temperature Ratings

NMOT (Nominal Module Operating Temperature)	45±2°C
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Voc	-0.025%/°C
Temperature Coefficient of Pmax	-0.034%/°C

I-V Curve at Different Temperature (510W)



I-V/P-V Curve at Different Temperature (510W)

