

MT6 655-685W

MS685M-66H

210mm Cells All Black
Mono PERC with MBB &
Half-cut Technology



High transparency
solar glass

Features

High Power up to 685W

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

High Energy Yield

Up to 22.06% 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

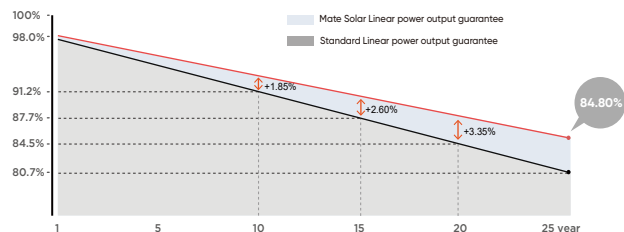
High Customer Value

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

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



WEB



WECHAT

Mechanical Data

Number of Cells	132 Cells (6x22)
Dimensions of Module L*W*H	2384 x 1303 x 35mm
Weight	33.6kg
Front Side Glass	High transparency solar glass 3.2mm
Back Side Glass	Black
Frame	Black, anodized aluminium alloy
Junction Box	IP68 Rated, 3 Diodes
Cable	4.0mm ² , Portrait: 350mm / Landscape: 1400mm
Wind/Snow Load	2400Pa/5400Pa
Connector	MC Compatible

* Please check the installation manual for more details

Electrical Specification (STC*)

Maximum Power (Pmax/W)	655	660	665	670	675	680	685
Maximum Power Voltage (Vmp/V)	37.60	37.80	38.00	38.20	38.40	38.60	38.80
Maximum Power Current (Imp/A)	17.43	17.47	17.50	17.54	17.58	17.62	17.66
Open Circuit Voltage (Voc/V)	45.50	45.70	45.90	46.10	46.30	46.50	46.70
Short Circuit Current (Isc/A)	18.48	18.53	18.58	18.63	18.68	18.73	18.78
Module Efficiency (%)	21.09	21.25	21.41	21.57	21.73	21.90	22.06
Power Output Tolerance (W)	0~+5W						

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

Electrical Specification (NMOT*)

Maximum Power (Pmax / W)	496	500	504	508	512	516	520
Maximum Power Voltage (Vmp / V)	35.10	35.30	35.50	35.70	35.90	36.10	36.30
Maximum Power Current (Imp / A)	14.14	14.17	14.20	14.23	14.27	14.30	14.33
Open Circuit Voltage (VOC / V)	42.80	43.00	43.20	43.40	43.60	43.80	44.00
Short Circuit Current (Isc / A)	14.89	14.93	14.97	15.01	15.05	15.09	15.13

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

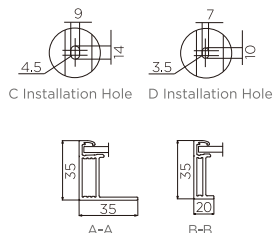
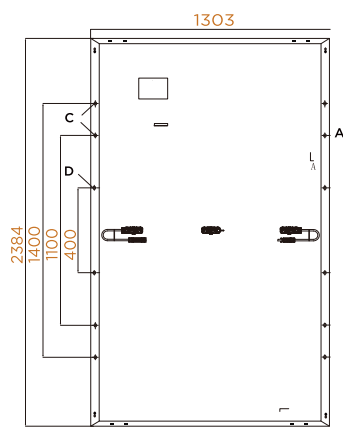
Maximum Ratings

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	30A

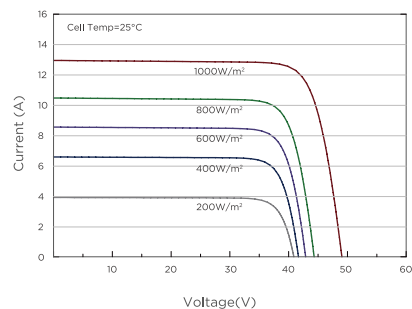
Packaging Configuration

Module per Box	31 pieces
Module per 40' Container	558 pieces

Module Dimension



I-V Curve at Different Temperature (685W)



I-V/P-V Curve at Different Temperature (685W)

