



MBB Half-cell Bifacial Module (66)

TW485~505PERC M10-132-D

PRODUCT FEATURES



High Power Output
Low LCOE



Maximum Power
505W+



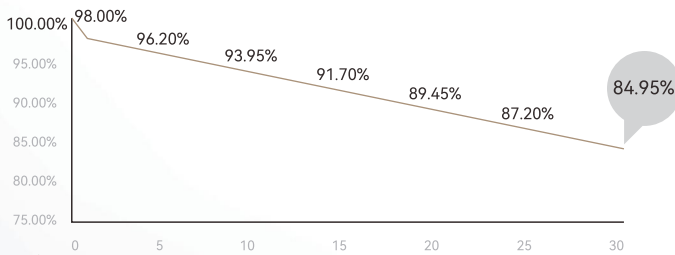
High Reliability



Low LID

POWER WARRANTY

1st year <2%, 0.45% power degradation per year from 2 to 25years



12-year warranty for materials



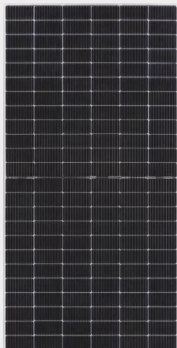
30-year warranty for linear power output

MANAGEMENT SYSTEM AND PRODUCT CERTIFICATION

ISO9001: 2015/Quality Management System

ISO14001: 2015/Environment Management System

ISO45001: 2018/Occupational Health and Safety



Front



Rear



Electrical Characteristics (STC)

Module type: TW***MBAP-132-D

Maximum power: Pmax (W)	485	490	495	500	505
Open circuit voltage: Voc (V)	45.2	45.4	45.6	45.8	46
Short circuit current: Isc (A)	13.67	13.72	13.77	13.82	13.87
Voltage at maximum power point: Vmp (V)	37.69	37.86	38.03	38.2	38.37
Current at maximum power point: Imp (A)	12.87	12.94	13.02	13.09	13.16
Module efficiency: η (%)	20.3	20.6	20.8	21.0	21.3
STC: Irradiance 1000W/m ² , Cell Temperature 25°C, Air Mass1.5, Measuring tolerance: $\pm 3\%$					

Electrical Characteristics (NMOT)

Maximum power: Pmax (W)	367.0	370.8	374.6	378.4	382.2
Open circuit voltage: Voc (V)	42.20	42.46	42.71	42.98	43.24
Short circuit current: Isc (A)	10.95	10.99	11.03	11.07	11.11
Voltage at maximum power point: Vmp (V)	34.84	35.03	35.22	35.41	35.60
Current at maximum power point: Imp (A)	10.52	10.57	10.63	10.68	10.74
NMOT: Irradiance 800W/m ² , Ambient Temperature 20 °C, Air Mass1.5, Wind Speed 1m/s					

Electrical characteristics with different rear side power gain

5%	Maximum power: Pmax (W)	509.3	514.5	519.8	525.0	530.3
	Module efficiency: η (%)	19.7	19.9	20.1	20.3	20.5
15%	Maximum power: Pmax (W)	557.8	563.5	569.3	575.0	580.8
	Module efficiency: η (%)	21.6	21.8	22.0	22.3	22.5
25%	Maximum power: Pmax (W)	606.3	612.5	618.8	625.0	631.3
	Module efficiency: η (%)	23.5	23.7	24.0	24.2	24.4

Mechanical Parameters

Cells	P-TPC
Orientation	132 (6×24)
Size	2093±2×1134±2×30mm
Weight	29.8kg
Front Glass	2.0mm AR coated heat strengthened glass
Rear Glass	2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0mm ² , Positive: 280mm, Negative: 280mm, length can be customized
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Packaging	36pcs per pallet, 792pcs per 40'HC

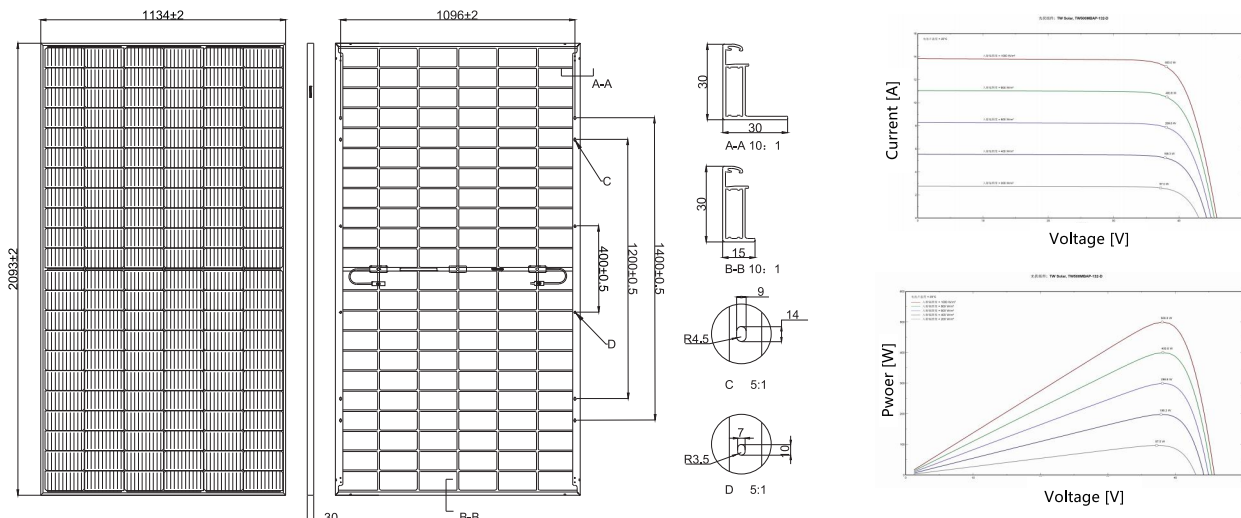
Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+5W
Bifaciality	70±5%

Temperature Ratings

Temperature Coefficient (Pmax)	-0.34%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	+0.05%/°C
NMOT	45±2°C

Drawings (Unit: mm)



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