



MBB Half-cell Bifacial Module (66)

TW645~670MBCP G12-132-D

PRODUCT FEATURES



High Power Output
Low LCOE



Maximum Power
670W+



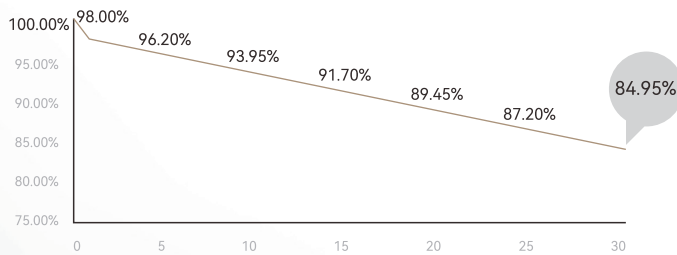
High
Reliability



Low
LID

POWER WARRANTY

1st year <2%, 0.45% power degradation per year from 2 to 30 years



12-year warranty for materials



30-year warranty for linear power output

PRODUCT CERTIFICATIONS

ISO9001: 2015/Quality Management System

ISO14001: 2015/Environment Management System

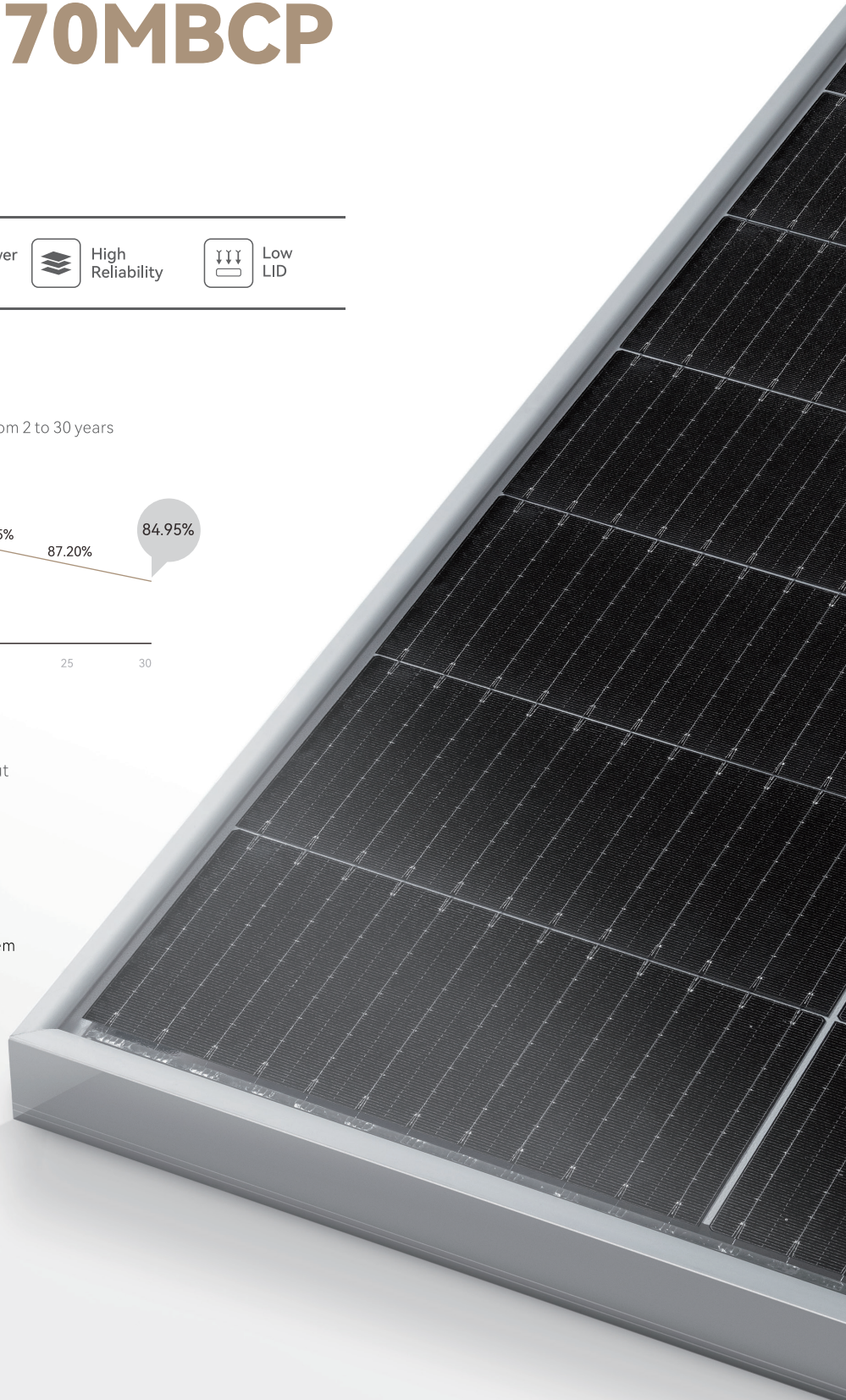
ISO45001: 2018/Occupational Health and Safety



Front



Rear



Electrical Characteristics (STC)

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

Maximum power: Pm (W)	645	650	655	660	665	670
Open circuit voltage: Voc (V)	45.20	45.40	45.60	45.80	46.00	46.20
Short circuit current: Isc (A)	18.17	18.21	18.26	18.31	18.36	18.41
Voltage at maximum power point: Vm (V)	37.40	37.60	37.80	38.00	38.20	38.40
Current at maximum power point: Im (A)	17.25	17.29	17.33	17.37	17.41	17.45
Module efficiency: η (%)	20.8	20.9	21.1	21.2	21.4	21.6

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass1.5, Measuring tolerance: ±3%

Electrical Characteristics (NMOT)

Maximum power: Pm (W)	488.0	491.8	495.6	499.4	503.1	506.9
Open circuit voltage: Voc (V)	42.58	42.77	42.96	43.14	43.33	43.52
Short circuit current: Isc (A)	14.65	14.68	14.72	14.76	14.80	14.84
Voltage at maximum power point: Vm (V)	34.89	35.08	35.26	35.45	35.64	35.82
Current at maximum power point: Im (A)	13.99	14.02	14.05	14.09	14.12	14.15

NMOT: Irradiance 800W/m², Ambient Temperature 20 °C, AM=1.5, Wind Speed 1m/s

Electrical characteristics with different power bin(reference to different Irradiance ratio)

5%	Maximum power: Pm (W)	677.3	682.5	687.8	693.0	698.3	703.5
	Module efficiency: η (%)	21.8	22.0	22.1	22.3	22.5	22.6
15%	Maximum power: Pm (W)	741.8	747.5	753.3	759.0	764.8	770.5
	Module efficiency: η (%)	23.9	24.1	24.2	24.4	24.6	24.8
25%	Maximum power: Pm (W)	806.3	812.5	818.8	825.0	831.3	837.5
	Module efficiency: η (%)	26.0	26.2	26.4	26.6	26.8	27.0

Mechanical Parameters

Cells	P-TPC
Orientation	132 (6×22)
Size	2384±2×1303±2×35mm
Weight	38.7kg
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: 200mm, Negative: 280mm, length can be customized
Connector	MC4 Compatible or MC4 original
Wind/Snow Load	2400Pa/5400Pa
Packaging	31pcs per pallet, 558pcs per 40'HC

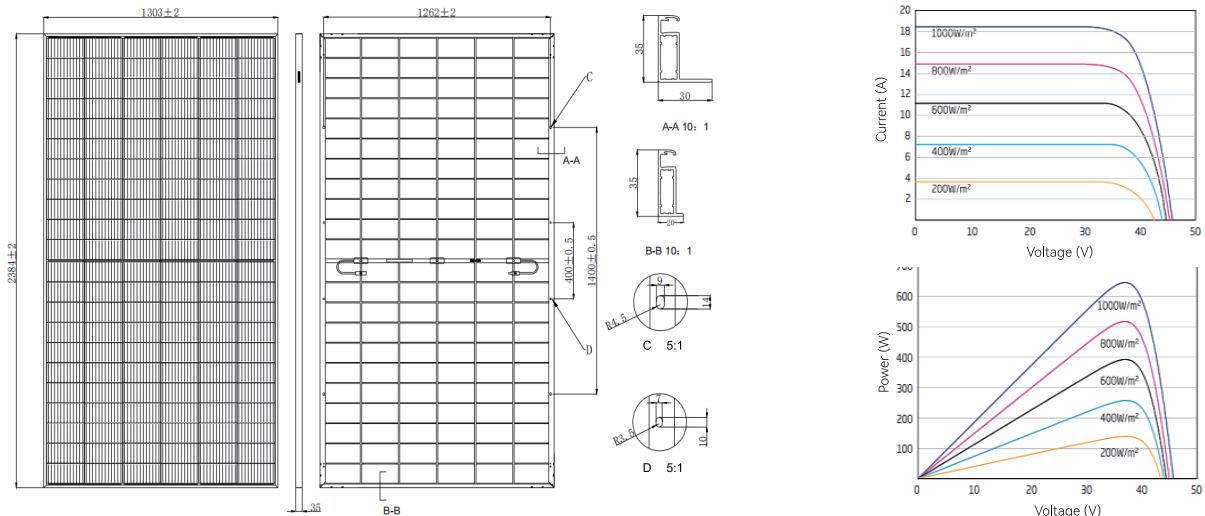
Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	35A
Power Output Tolerance	0~+5W
Bifaciality	70±5%

Temperature Ratings

Temperature Coefficient (Pmax)	-0.35%/°C
Temperature Coefficient (Voc)	-0.28%/°C
Temperature Coefficient (Isc)	+0.05%/°C
NMOT	45±2°C

Drawings (Unit: mm)



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