

MBB Half-cell Monofacial Module (72)³⁰

TW535~560MAP

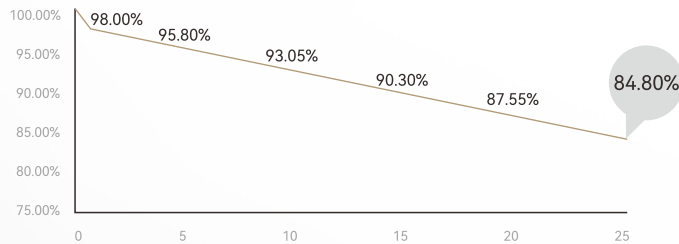
M10-144-H

PRODUCT FEATURES



POWER WARRANTY

1st year <2%, 0.55% power degradation per year from 2 to 25 years



12 12-year warranty for materials

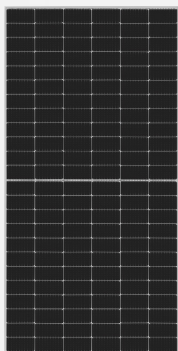
25 25-year warranty for linear power output

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**MAP-144-H

Maximum power: Pm (W)	535	540	545	550	555	560
Open circuit voltage: Voc (V)	49.51	49.75	49.98	50.22	50.45	50.68
Short circuit current: Isc (A)	13.60	13.63	13.66	13.70	13.73	13.76
Voltage at maximum power point: Vm (V)	41.77	42.06	42.35	42.64	42.93	43.22
Current at maximum power point: Im (A)	12.81	12.84	12.87	12.90	12.93	12.96
Module efficiency: η (%)	20.7	20.9	21.1	21.3	21.5	21.7

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

Electrical Characteristics (NMOT)

Maximum power: Pm (W)	404.8	408.6	412.4	416.2	420.0	423.8
Open circuit voltage: Voc (V)	46.74	46.96	47.18	47.40	47.62	47.85
Short circuit current: Isc (A)	10.89	10.92	10.94	10.97	10.99	11.02
Voltage at maximum power point: Vm (V)	38.74	39.01	39.28	39.55	39.82	40.09
Current at maximum power point: Im (A)	10.45	10.47	10.50	10.52	10.55	10.57

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

Mechanical Parameters

Cells	Monocrystalline silicon cell
Orientation	144 (6×24)
Size	2278±2×1134±2×30mm
Weight	26.8kg
Glass	3.2mm high transmittance, AR coated heat strengthened glass
Backsheet	White
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0mm ² , Landscape: 1200/1200mm, Portrait: 280/280mm
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Packaging	36pcs per pallet, 720pcs per 40HC

Operating Parameters

Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25A
Power Output Tolerance	0~+5W

Temperature Ratings

Temperature Coefficient (Pmax)	-0.35%/°C
Temperature Coefficient (Voc)	-0.27%/°C
Temperature Coefficient (Isc)	0.045%/°C
NMOT	43±2°C

Drawings (Unit: mm)

