



TWMND

N-type Half-cell
Bifacial Module (72)

72HD580-600W

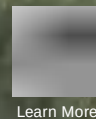
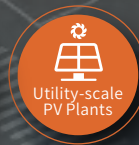
High Power Output
Low LCOE



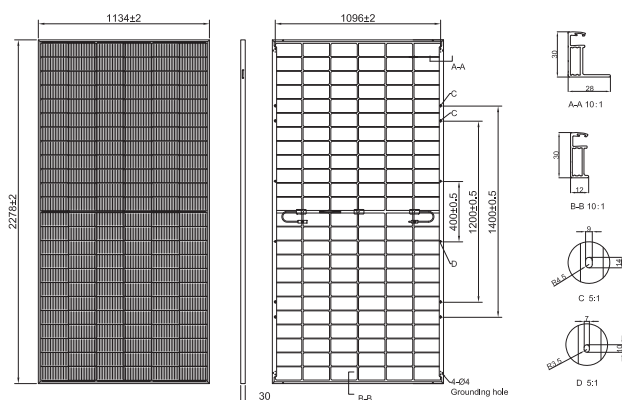
Maximum Power
600W+



<https://en.tongwei.cn/>



Drawings (Unit: mm)



Electrical Characteristics (STC)

Module type: TWMND-72HDXXX

Maximum Power: Pmax [W]	580	585	590	595	600
Open Circuit Voltage: Voc [V]	52.30	52.50	52.70	53.20	53.40
Short Circuit Current: Isc [A]	13.85	13.90	13.95	14.15	14.20
Voltage at Maximum Power: Vmp [V]	43.93	44.10	44.27	44.41	44.55
Current at Maximum Power: Imp [A]	13.21	13.27	13.33	13.40	13.47
Module Efficiency: η [%]	22.5	22.6	22.8	23.0	23.2

* STC: Irradiance 1000W/m², Cell temperature 25°C, AM=1.5, Power measurement tolerance: ±3%

Electrical Characteristics (BNPI)

Maximum Power: Pmax [W]	640.5	646.1	651.6	656.8	662.5
Open Circuit Voltage: Voc [V]	52.30	52.50	52.70	53.20	53.40
Short Circuit Current: Isc [A]	15.29	15.34	15.40	15.62	15.68
Voltage at Maximum Power: Vmp [V]	43.93	44.10	44.27	44.41	44.55
Current at Maximum Power: Imp [A]	14.58	14.65	14.72	14.79	14.87

* BNPI: Front side irradiance 1000W/m², Rear side irradiance 135W/m², Cell Temperature=25°C, AM=1.5
Power measurement tolerance: ±3%

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax[W]	609	614	619	624	630
	Module Efficiency: η [%]	23.6	23.8	24.0	24.2	24.4
15%	Maximum Power: Pmax[W]	667	672	678	684	690
	Module Efficiency: η [%]	25.8	26.0	26.2	26.5	26.7
25%	Maximum Power: Pmax[W]	725	731	737	743	750
	Module Efficiency: η [%]	28.1	28.3	28.5	28.8	29.0

Temperature Rating

Temperature Coefficient of Pmax	-0.28%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.046%/°C

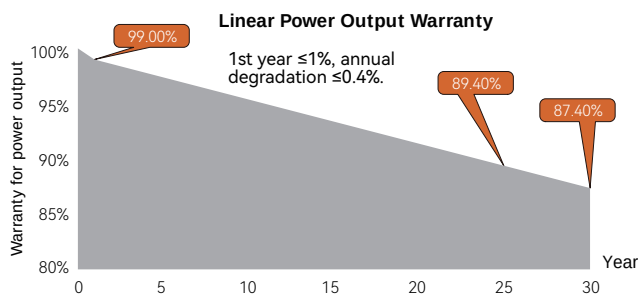
Operating Parameters

Operating Temperature	-40°C~+70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality coefficient of Pmax	80±5%
Bifaciality coefficient of Voc	98±5%
Bifaciality coefficient of Isc	80±5%

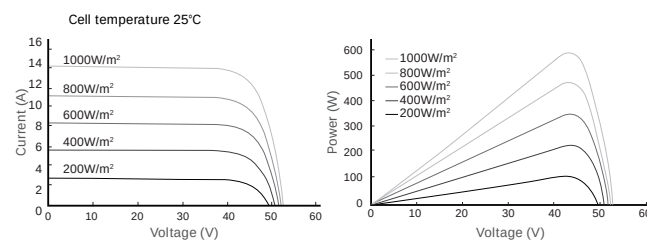
Mechanical Parameters

Cell Type	TNC (N Type Monocrystalline Cell)
Cell Orientation	144[6×24]
Dimensions	2278±2×1134±2×30mm
Weight	31.5kg
Front Glass	2.0mm AR coating semi tempered glass
Rear Glass	2.0mm semi tempered glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0mm ²
Cable length	+400mm, -200mm or ±1400mm, length can be customized
Wind/Snow load	2400Pa/5400Pa
Per pallet	36 pcs
Packaging	720 pcs per 40'HC

Linear Warranty



I-V 曲线



Certifications

Quality Management System and Product Certification

ISO 9001: 2015/Quality management systems
ISO 14001: 2015/Environmental management systems
ISO 45001: 2018/Occupation health and safety management systems
ISO 50001: 2018/Energy management systems
IEC 62941: 2019/Quality system for PV module manufacturing
IEC 61215(2021) / IEC 61730(2023), IEC 62804(PID),
IEC 61701(Salt), IEC 62716 (Ammonia), IEC 60068-2-68(Sand)

