



High Power Output
Low LCOE



Maximum Power
600W+



TWMND

N-type Half-cell
Bifacial Module (72)

72HD580-600W

Tongwei Co.,Ltd.
en.tongwei.com.cn



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NEW ENERGY FINANCE



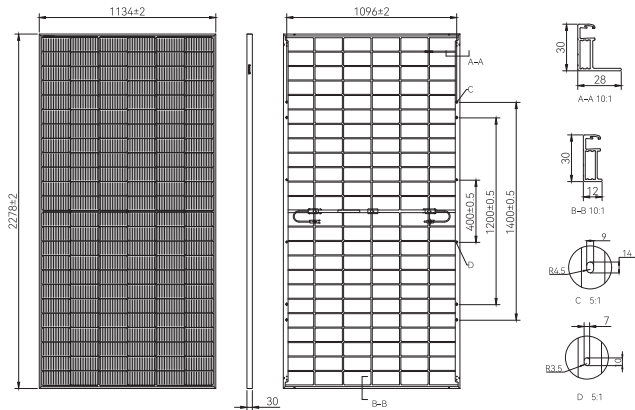
12
YEAR
Materials
Warranty

30
YEAR
Power
Warranty



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DRAWINGS (Unit: mm)



ELECTRICAL CHARACTERISTICS (STC)

Model type: TWMND-72HDXXX					
Maximum Power: P _{max} [W]	580	585	590	595	600
Open Circuit Voltage: V _{oc} [V]	52.30	52.50	52.70	53.20	53.40
Short Circuit Current: I _{sc} [A]	13.85	13.90	13.95	14.15	14.20
Voltage at Maximum Power: V _{mp} [V]	43.93	44.10	44.27	44.41	44.55
Current at Maximum Power: I _{mp} [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: P _{max} [W]	640.5	646.1	651.6	656.8	662.5
Open Circuit Voltage: V _{oc} [V]	52.30	52.50	52.70	53.20	53.40
Short Circuit Current: I _{sc} [A]	15.29	15.34	15.40	15.62	15.68
Voltage at Maximum Power: V _{mp} [V]	43.93	44.10	44.27	44.41	44.55
Current at Maximum Power: I _{mp} [A]	14.58	14.65	14.72	14.79	14.87

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

ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power: P _{max} [W]	436.2	439.9	443.7	447.4	451.2
Open Circuit Voltage: V _{oc} [V]	49.69	49.88	50.07	50.54	50.73
Short Circuit Current: I _{sc} [A]	11.18	11.22	11.26	11.42	11.46
Voltage at Maximum Power: V _{mp} [V]	40.89	41.08	41.24	41.35	41.48
Current at Maximum Power: I _{mp} [A]	10.67	10.71	10.76	10.82	10.88

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

TEMPERATURE RATING

Temperature Coefficient of P _{max}	-0.28%/°C
Temperature Coefficient of V _{oc}	-0.24%/°C
Temperature Coefficient of I _{sc}	+0.046%/°C
NMOT	45±2°C

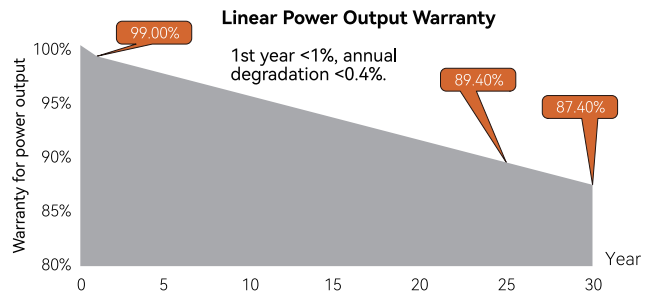
OPERATING PARAMETERS

Operating Temperature	-40°C~+70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Selection Tolerance	0~+3%
Bifaciality coefficient of P _{max}	80±5%
Bifaciality coefficient of V _{oc}	98±5%
Bifaciality coefficient of I _{sc}	80±5%
Fire Class Rating	Class C

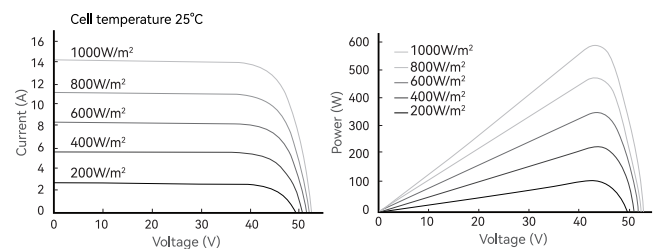
MECHANICAL PARAMETERS

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 coated heat strengthened glass
Rear Glass	2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3diodes
Cable	4.0mm ²
Cable length	+400mm, -200mm or ±1400mm, length can be customized
Connector	TW-PVCON-01(Tongwei Solar) PV-KST4-EVO2/xy_UR, PV-KBT4-EVO2/xy_UR(Stäubli) PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy(Stäubli) PV-ZH202B(Zhonghuan), PV-JK03M2/xy(Jinko)
Wind/Snow load	2400Pa/5400Pa
Per pallet	36pcs
Packaging	720pcs per 40'HC

WARRANTY



I-V CURVE



CERTIFICATIONS

Quality Management System and Product Certification

ISO 9001: 2015 / Quality management systems
ISO 14001: 2015 / Environmental management systems
ISO 45001: 2018 / Occupational 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)

