

TWMND

N-type Half-cell
Bifacial Module (78)

78HD620-640W

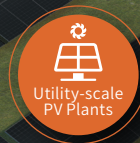
High Power Output
Low LCOE



Maximum Power
640W+

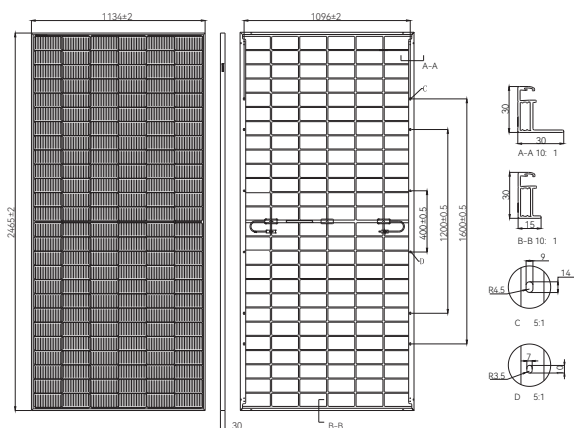


Tongwei Co.,Ltd.
<https://en.tongwei.cn/>



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Drawings (Unit: mm)



Electrical characteristics (STC)

Modul type:	TWMND-78 HD620	TWMND-78 HD625	TWMND-78 HD630	TWMND-78 HD635	TWMND-78 HD640
Maximum Power: Pmax [W]	620	625	630	635	640
Open Circuit Voltage: Voc [V]	56.60	56.80	57.00	57.20	57.40
Short Circuit Current: Isc [A]	13.70	13.74	13.78	13.82	13.86
Voltage at Maximum Power: Vmp [V]	47.54	47.71	47.88	48.05	48.22
Current at Maximum Power: Imp [A]	13.05	13.10	13.16	13.22	13.28
Module Efficiency: η [%]	22.2	22.4	22.5	22.7	22.9

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

Electrical characteristics (BNPI)

Maximum Power: Pmax [W]	685.1	689.9	695.7	701.0	706.8
Open Circuit Voltage: Voc [V]	56.60	56.80	57.00	57.20	57.40
Short Circuit Current: Isc [A]	15.12	15.17	15.21	15.26	15.30
Voltage at Maximum Power: Vmp [V]	47.54	47.71	47.88	48.05	48.22
Current at Maximum Power: Imp [A]	14.41	14.46	14.53	14.59	14.66

* BNPI: Front side Irradiance 1000W/m², Back 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]	651.0	656.3	661.5	666.8	672.0
	Module Efficiency: η [%]	23.3	23.5	23.7	23.9	24.0
15%	Maximum Power: Pmax[W]	713.0	718.8	724.5	730.3	736.0
	Module Efficiency: η [%]	25.5	25.7	25.9	26.1	26.3
25%	Maximum Power: Pmax[W]	775.0	781.3	787.5	793.8	800.0
	Module Efficiency: η [%]	27.7	27.9	28.2	28.4	28.6

Temperature rating

Temperature Coefficient of Pmax	-0.28%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Isc	+0.046%/°C
NMOT	45±2°C

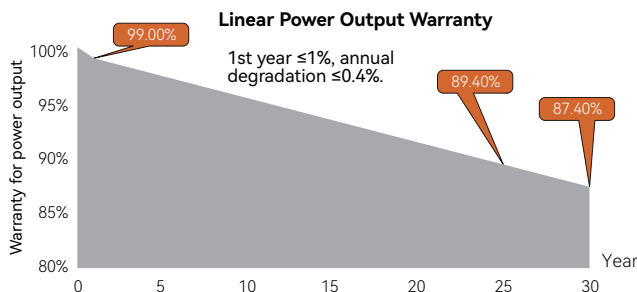
Operating parameters

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

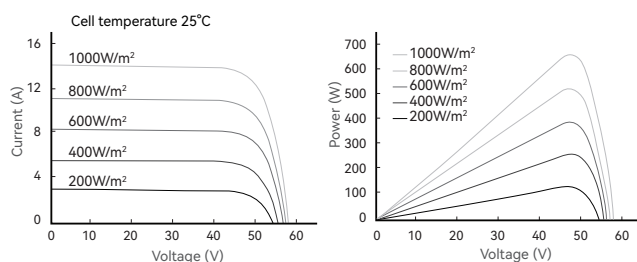
Mechanical parameters

Cell Type	TNC (N Type Monocrystalline Cell)
Cell Orientation	156[6×26]
Dimensions	2465±2×1134±2×30mm
Weight	33.8kg
Front Glass	2.0mm AR coated heat strengthened glass
Rear Glass	2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 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	576pcs 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)

