



TWMND

N-type Half-cell
Bifacial Module (78)

78HD625-645W

High Power Output
Low LCOE



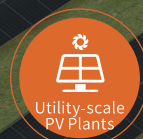
Maximum Power
645W+



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12
YEAR
Materials
Warranty

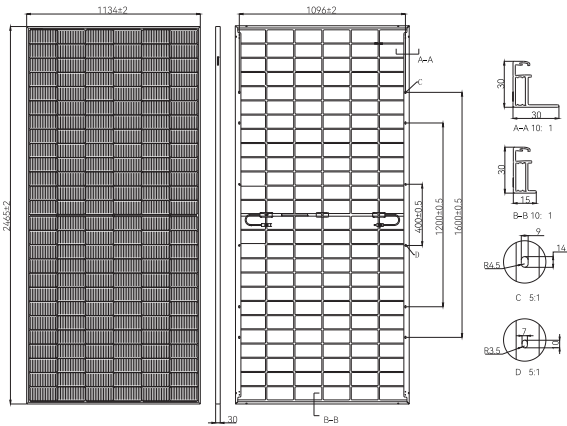


30
YEAR
Power
Warranty



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Drawing (Unit: mm)



Electrical Characteristics (STC)

Model type: TWMND-78HDXXX

Maximum Power: Pmax [W]	625	630	635	640	645
Open Circuit Voltage: Voc [V]	56.80	57.00	57.20	57.40	57.60
Short Circuit Current: Isc [A]	13.74	13.78	13.82	13.86	14.05
Voltage at Maximum Power: Vmp [V]	47.71	47.88	48.05	48.22	48.36
Current at Maximum Power: Imp [A]	13.10	13.16	13.22	13.28	13.34
Module Efficiency: η [%]	22.4	22.5	22.7	22.9	23.1

* STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Electrical Characteristics (NMOT)

Maximum Power: Pmax [W]	470.0	473.8	477.5	481.3	485.0
Open Circuit Voltage: Voc [V]	53.96	54.15	54.34	54.53	54.72
Short Circuit Current: Isc [A]	11.09	11.13	11.16	11.19	11.34
Voltage at Maximum Power: Vmp [V]	44.43	44.62	44.76	44.90	45.04
Current at Maximum Power: Imp [A]	10.58	10.62	10.67	10.72	10.77

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

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax [W]	656.3	661.5	666.8	672.0	677.3
	Module Efficiency: η [%]	23.5	23.7	23.9	24.0	24.2
15%	Maximum Power: Pmax [W]	718.8	724.5	730.3	736.0	741.8
	Module Efficiency: η [%]	25.7	25.9	26.1	26.3	26.5
25%	Maximum Power: Pmax [W]	781.3	787.5	793.8	800.0	806.3
	Module Efficiency: η [%]	27.9	28.2	28.4	28.6	28.8

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

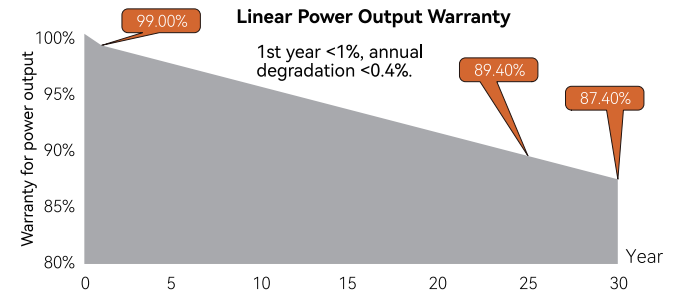
Operating Parameters

Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality	80±5%

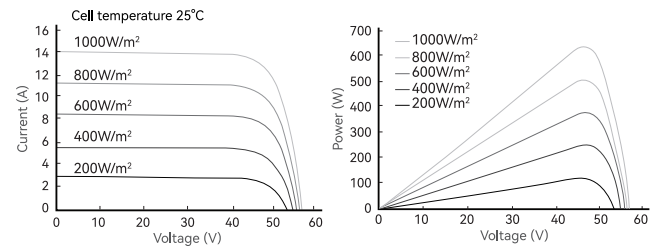
Mechanical Parameters

Cells	TNC(N Type Monocrystalline Cell)
Cell Orientation	156[6×26]
Dimension	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	IP68,3 diodes
Output Cable	4.0mm ²
Cable Length	+400mm, -200mm or ±1400mm, length can be customized
Wind/Snow Load	2400Pa / 5400Pa
Packaging	36pcs per pallet, 576pcs per 40'HC

Warranty



I-V Curve



Certifications

Quality Management System and Product Certification

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

