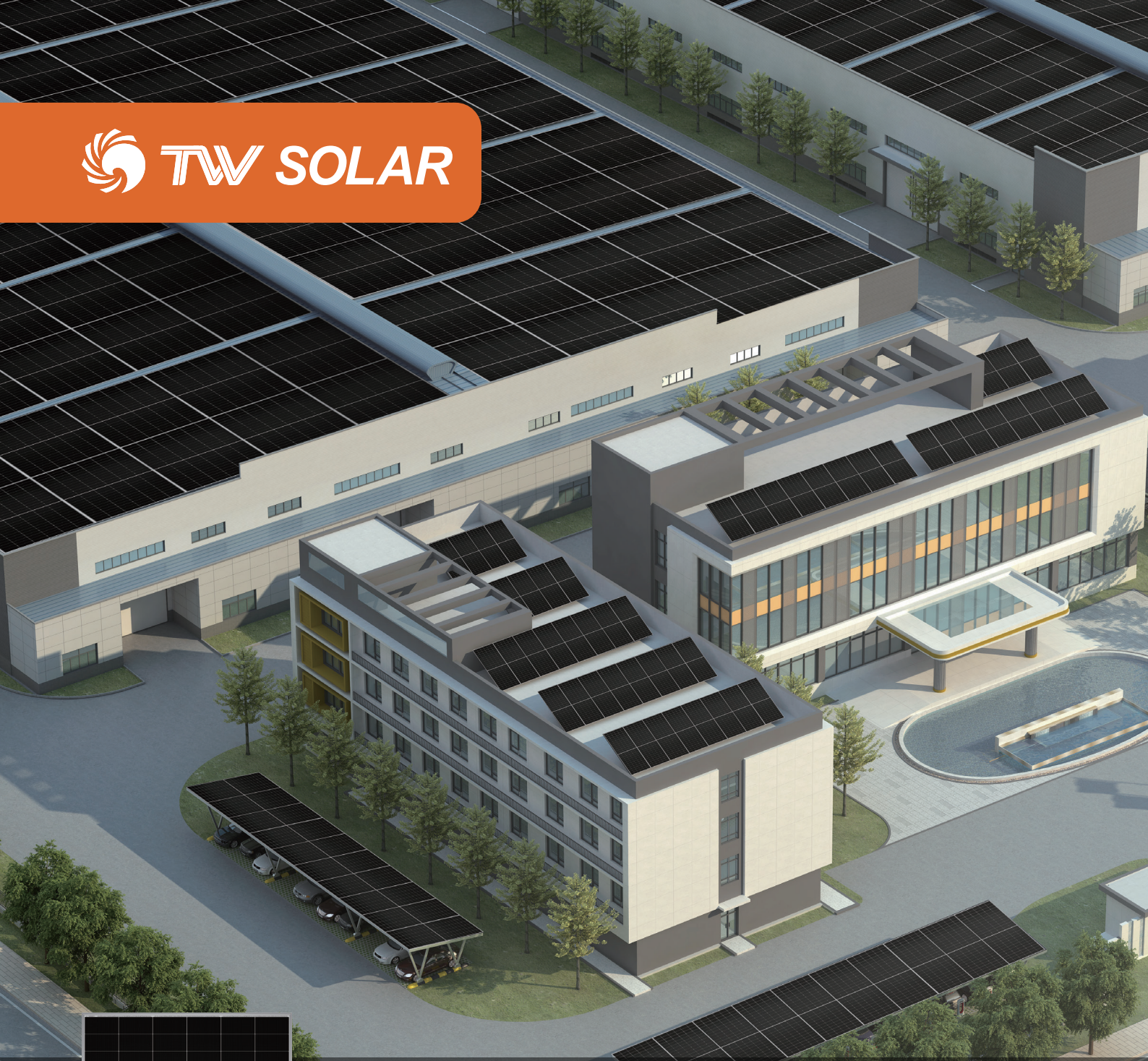

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Low LCOE

Maximum Power
595W+

TWMND

N-type Half-cell Bifacial Module (72)

72HD575-595W

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Commercial Rooftop

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12 YEAR Materials Warranty

30 YEAR Power Warranty

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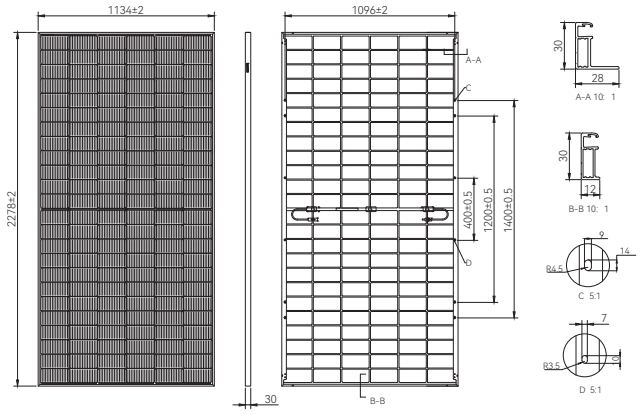
TWMND N-type Half-cell Bifacial Module (72)

72HD575-595W

Drawings (Unit: mm)



Electrical characteristics (STC)

Moduel type:	TWMND-72 HD575	TWMND-72 HD580	TWMND-72 HD585	TWMND-72 HD590	TWMND-72 HD595
Maximum Power: Pmax [W]	575	580	585	590	595
Open Circuit Voltage: Voc [V]	52.10	52.30	52.50	52.70	53.20
Short Circuit Current: Isc [A]	13.80	13.85	13.90	13.95	14.15
Voltage at Maximum Power: Vmp [V]	43.76	43.93	44.10	44.27	44.41
Current at Maximum Power: Imp [A]	13.14	13.21	13.27	13.33	13.40
Module Efficiency: η [%]	22.3	22.5	22.6	22.8	23.0

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

Electrical characteristics (BNPI)

Maximum Power: Pmax [W]	635.0	640.5	646.1	651.6	656.8
Open Circuit Voltage: Voc [V]	52.10	52.30	52.50	52.70	53.20
Short Circuit Current: Isc [A]	15.23	15.29	15.34	15.40	15.62
Voltage at Maximum Power: Vmp [V]	43.76	43.93	44.10	44.27	44.41
Current at Maximum Power: Imp [A]	14.51	14.58	14.65	14.72	14.79

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

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax[W]	603.8	609.0	614.3	619.5	624.8
	Module Efficiency: η [%]	23.4	23.6	23.8	24.0	24.2
15%	Maximum Power: Pmax[W]	661.3	667.0	672.8	678.5	684.3
	Module Efficiency: η [%]	25.6	25.8	26.0	26.3	26.5
25%	Maximum Power: Pmax[W]	718.8	725.0	731.3	737.5	743.8
	Module Efficiency: η [%]	27.8	28.1	28.3	28.5	28.8

Temperature rating

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

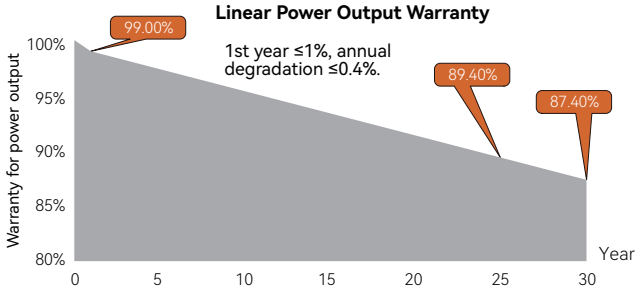
Operating parameters

Operating Temperature	-40℃~+70℃
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

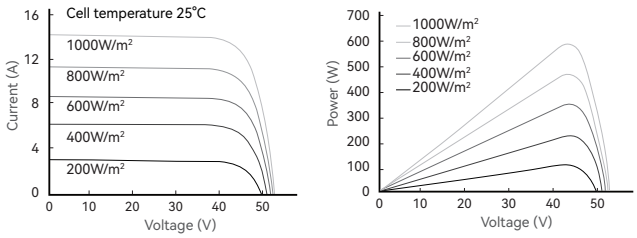
Mechanical parameters

Cell Type	TNC (N Type Monocrystalline Cell)
Cell Orientation	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	4.0mm²
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)

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