

TNC 2.0

N-type Half-cell Bifacial Module (66)

TWMNH-66HD



Higher power generation, lower LCOE



Higher power output, higher conversion efficiency

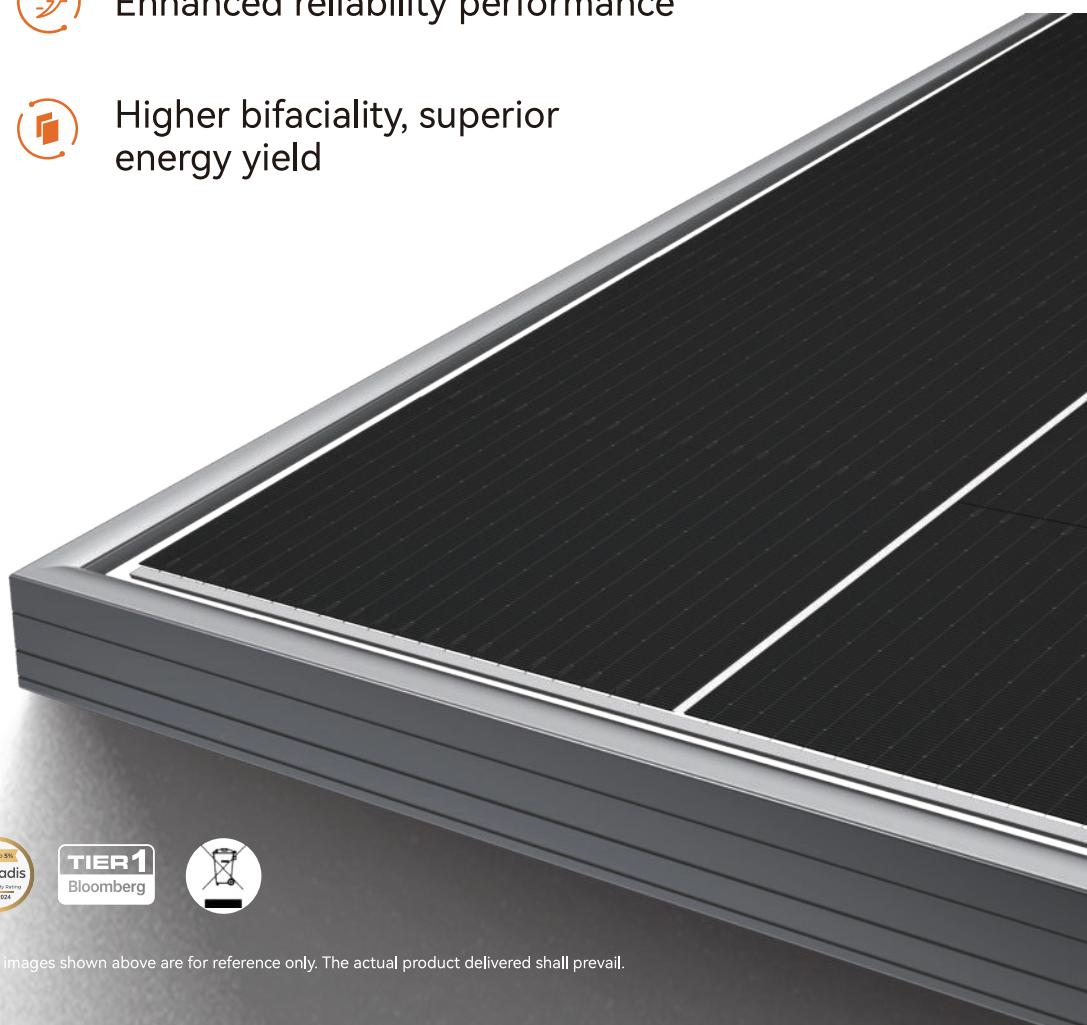
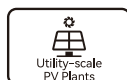


Enhanced reliability performance

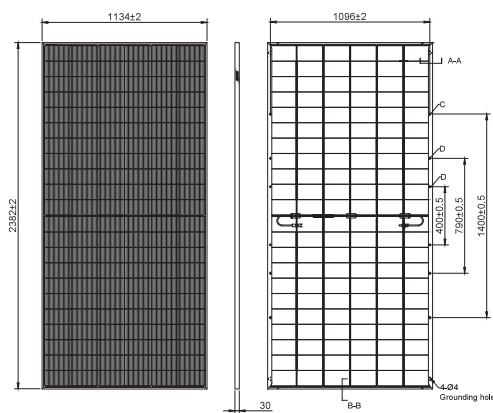


Higher bifaciality, superior energy yield

645-665W



Drawings (Unit: mm)



Electrical Characteristics (STC)

Module type:	TWMNH-66 HD645	TWMNH-66 HD650	TWMNH-66 HD655	TWMNH-66 HD660	TWMNH-66 HD665
Maximum Power: Pmax [W]	645	650	655	660	665
Open Circuit Voltage: Voc [V]	49.85	50.00	50.15	50.30	50.45
Short Circuit Current: Isc [A]	16.39	16.45	16.52	16.59	16.66
Voltage at Maximum Power: Vmp [V]	41.51	41.65	41.78	41.91	42.04
Current at Maximum Power: Imp [A]	15.54	15.61	15.68	15.75	15.82
Module Efficiency: η [%]	23.88	24.06	24.25	24.43	24.62

* STC: Irradiance 1000W/m², Cell temperature 25°C, AM=1.5, Power measurement tolerance: ±3%, Voc measurement tolerance: ±5%, Isc measurement tolerance: ±5%

Electrical Characteristics (BNPI)

Maximum Power: Pmax [W]	712.3	717.6	723.2	728.8	734.0
Open Circuit Voltage: Voc [V]	49.85	50.00	50.15	50.30	50.45
Short Circuit Current: Isc [A]	18.09	18.16	18.24	18.31	18.39
Voltage at Maximum Power: Vmp [V]	41.51	41.65	41.78	41.91	42.04
Current at Maximum Power: Imp [A]	17.16	17.23	17.31	17.39	17.46

* BNPI: Front side irradiance 1000W/m², Rear side irradiance 135W/m², Cell Temperature=25°C, AM=1.5
Power measurement tolerance: ±3%, Voc measurement tolerance: ±5%, Isc measurement tolerance: ±5%

Electrical Characteristics (BSI)

Short Circuit Current: Isc [A]	20.18	20.25	20.34	20.42	20.51
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* BSI: Front side irradiance 1000W/m², Rear side irradiance 300W/m², Cell Temperature=25°C, AM=1.5
Isc measurement tolerance: ±5%

Electrical characteristics with different rear side power gain

5%	Maximum Power: Pmax[W]	677	682	687	693	698
	Module Efficiency: η [%]	25.06	25.25	25.43	25.66	25.84
15%	Maximum Power: Pmax[W]	741	747	753	759	764
	Module Efficiency: η [%]	27.43	27.65	27.88	28.10	28.28
25%	Maximum Power: Pmax[W]	806	812	818	825	831
	Module Efficiency: η [%]	29.84	30.06	30.28	30.54	30.76

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

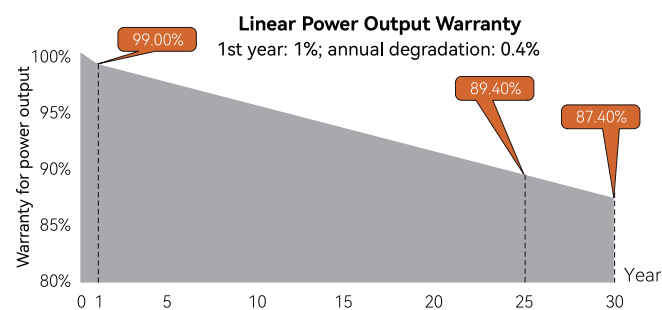
Operating Temperature*	[T _g] _{≤70°C}
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality coefficient of Pmax	80±5%
Bifaciality coefficient of Voc	98±5%
Bifaciality coefficient of Isc	80±5%
Fire Class Rating	Class C

*The module operating temperature can reach up to 85°C for short term.

Mechanical Parameters

Cell Type	TNC
Cell Orientation	132[6×22]
Dimension	2382±2×1134±2×30mm
Weight	32.2 kg
Front Glass	2.0 mm AR coating semi tempered glass
Rear Glass	2.0 mm semi tempered glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, 3 diodes
Cable	4.0 mm ²
Cable Length	+400 mm, -200 mm or ±1,400 mm; length can be customized
Connector	TW-PVCON-01, TW-PVCON-02 (Tongwei Solar) PV-KST4-EVO2/xy_UR, PV-KBT4-EVO2/xy_UR (Staubli) PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy (Staubli) PV-ZH202B (Zhejiang Zhonghuan Sunter)
Maximum Static Test Load	5400Pa (positive) / 2400Pa (negative)
Packaging (Per pallet)	36 pcs
Packaging	720 pcs per 40'HC

Warranty

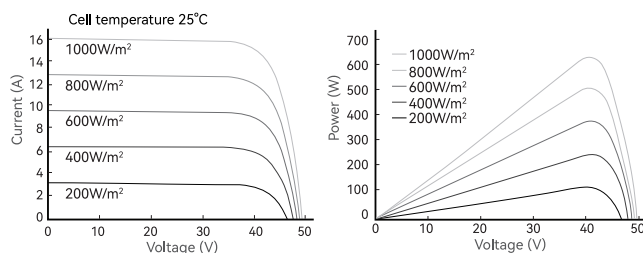


12 12-Year Material and Workmanship Warranty

30 30-Year Linear Power Output Warranty

*The warranty is applicable under STC.

Curve



Certifications

Quality Management System and Product Certification

ISO 9001: 2015 / Quality Management System
ISO 14001: 2015 / Environmental Management System
ISO 45001: 2018 / Occupational Health and Safety Management System
ISO 50001: 2018 / Energy Management System
IEC 62941: 2019 / Quality System for PV Module Manufacturing
IEC 61215 (2021) / IEC 61730 (2023), IEC TS 62804,
IEC 61701, IEC 62716, IEC 60068-2-68



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