

TNC 2.0

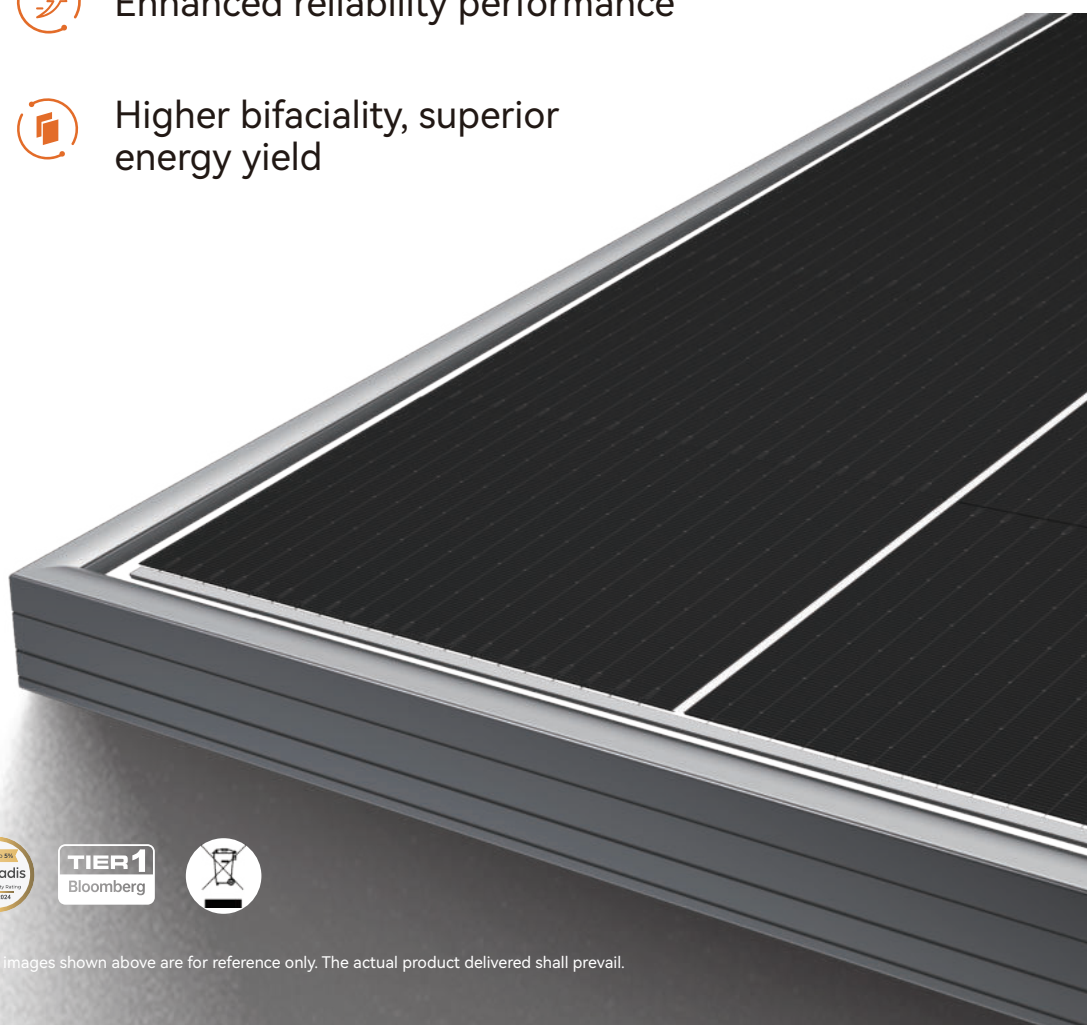
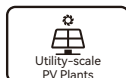
N-type Half-cell Bifacial Module (66)

TWMNH-66HD

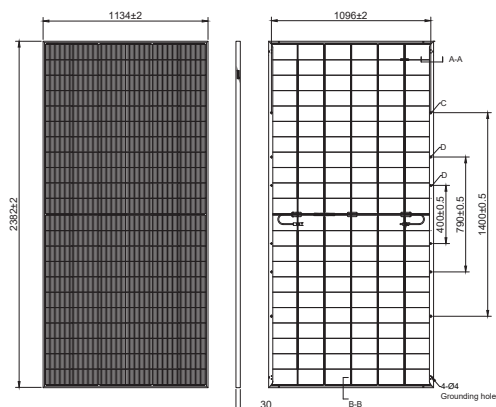


-  Higher power generation, lower LCOE
-  Higher power output, higher conversion efficiency
-  Enhanced reliability performance
-  Higher bifaciality, superior energy yield

605-640W



Drawings (Unit: mm)



Electrical Characteristics (STC)

Module type:	TWMNH-66 HD605	TWMNH-66 HD610	TWMNH-66 HD615	TWMNH-66 HD620	TWMNH-66 HD625
Maximum Power: P _{max} [W]	605	610	615	620	625
Open Circuit Voltage: V _{oc} [V]	48.50	48.70	48.90	49.10	49.30
Short Circuit Current: I _{sc} [A]	15.88	15.94	16.00	16.06	16.12
Voltage at Maximum Power: V _{mp} [V]	40.31	40.48	40.65	40.82	40.96
Current at Maximum Power: I _{mp} [A]	15.01	15.07	15.13	15.19	15.26
Module Efficiency: η [%]	22.40	22.58	22.77	22.95	23.14

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

Electrical Characteristics (BNPI)

Maximum Power: P _{max} [W]	667.9	673.6	678.9	684.6	690.2
Open Circuit Voltage: V _{oc} [V]	48.50	48.70	48.90	49.10	49.30
Short Circuit Current: I _{sc} [A]	17.53	17.60	17.66	17.73	17.80
Voltage at Maximum Power: V _{mp} [V]	40.31	40.48	40.65	40.82	40.96
Current at Maximum Power: I _{mp} [A]	16.57	16.64	16.70	16.77	16.85

* 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%, I_{sc} measurement tolerance: ±5%

Electrical Characteristics (BSI)

Short Circuit Current: I _{sc} [A]	19.55	19.62	19.70	19.77	19.84
--	-------	-------	-------	-------	-------

* BSI: Front side irradiance 1000W/m², Rear side irradiance 300W/m², Cell Temperature=25°C, AM=1.5
I_{sc} measurement tolerance: ±5%

Electrical characteristics with different rear side power gain

Maximum Power: P _{max} [W]	635	640	645	651	656
Module Efficiency: η [%]	23.51	23.69	23.88	24.10	24.29
Maximum Power: P _{max} [W]	695	701	707	713	718
Module Efficiency: η [%]	25.73	25.95	26.17	26.40	26.58
Maximum Power: P _{max} [W]	756	762	768	775	781
Module Efficiency: η [%]	27.99	28.21	28.43	28.69	28.91

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

Operating Parameters

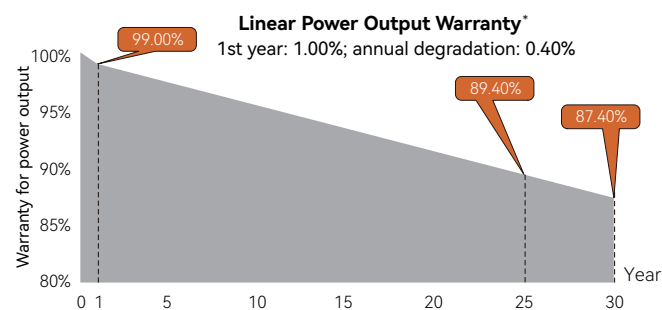
Operating Temperature*	[T _g] ≤ 70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality coefficient of P _{max}	80±5%
Bifaciality coefficient of V _{oc}	98±5%
Bifaciality coefficient of I _{sc}	80±5%
Fire Class Rating	Class C

* 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

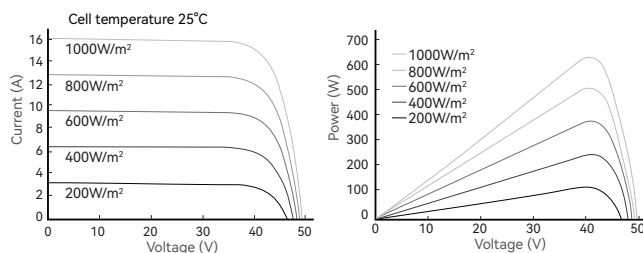


12 12-Year Material and Workmanship Warranty

30 30-Year Linear Power Output Warranty

*The warranty is applicable under STC.

Curve



Certifications

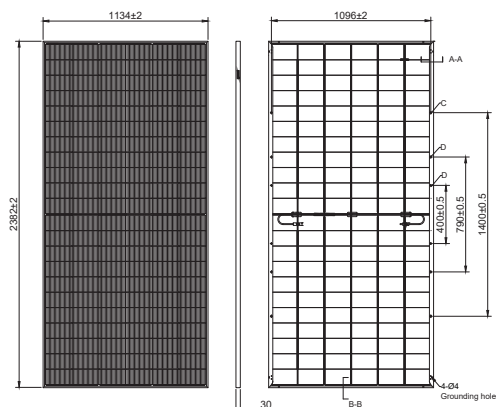
Quality Management System and Product Certification

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



Scan the code for more information

Drawings (Unit: mm)



Electrical Characteristics (STC)

Module type:	TWMNH-66 HD630	TWMNH-66 HD635	TWMNH-66 HD640
Maximum Power: Pmax [W]	630	635	640
Open Circuit Voltage: Voc [V]	49.50	49.60	49.75
Short Circuit Current: Isc [A]	16.18	16.26	16.33
Voltage at Maximum Power: Vmp [V]	41.10	41.24	41.38
Current at Maximum Power: Imp [A]	15.33	15.40	15.47
Module Efficiency: η [%]	23.32	23.51	23.69

* 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]	695.4	701.1	706.8
Open Circuit Voltage: Voc [V]	49.50	49.60	49.75
Short Circuit Current: Isc [A]	17.86	17.95	18.03
Voltage at Maximum Power: Vmp [V]	41.10	41.24	41.38
Current at Maximum Power: Imp [A]	16.92	17.00	17.08

* 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]	19.92	20.02	20.10
--------------------------------	-------	-------	-------

* 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]	661	666	672
	Module Efficiency: η [%]	24.47	24.66	24.88
15%	Maximum Power: Pmax[W]	724	730	736
	Module Efficiency: η [%]	26.80	27.03	27.25
25%	Maximum Power: Pmax[W]	787	793	800
	Module Efficiency: η [%]	29.14	29.36	29.62

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

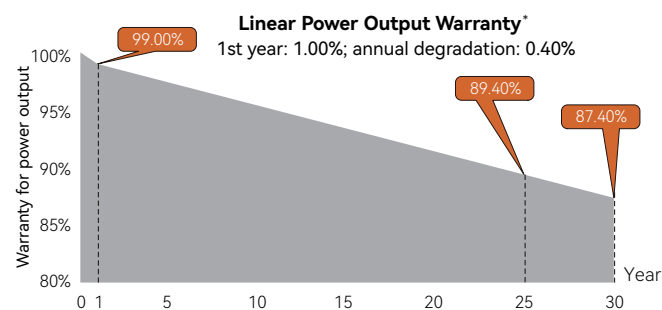
Operating Temperature*	[T ₉₅]≤70°C
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30A
Power Output Tolerance	0~+3%
Bifaciality coefficient of Pmax	80±5%
Bifaciality coefficient of Voc	98±5%
Bifaciality coefficient of Isc	80±5%
Fire Class Rating	Class C

*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

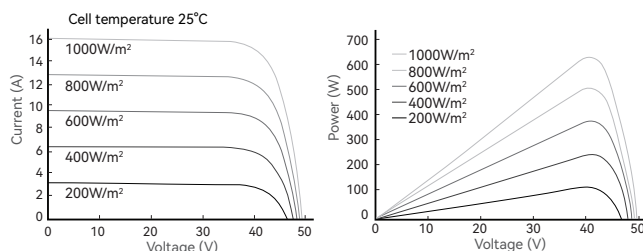


12 12-Year Material and Workmanship Warranty

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



Scan the code for more information