TALESUN

HYPRO
440 - 465W
TH3G48M
Bifacial Dual Glass
0BB Half Cell N-type HJT

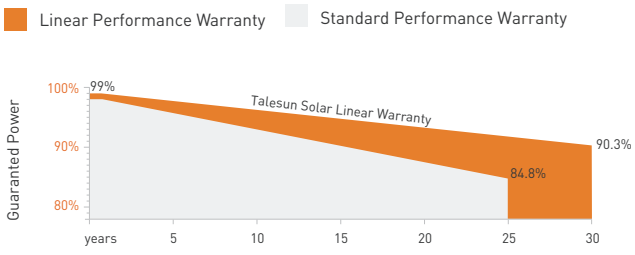
KEY FEATURES

- Better Shading Tolerance
- Ultra-High Bifacial Factor
- Ultra-High Power Generation
- Most Stable Power Temperature Coefficient
- Lead Technology of Metallization Process
- Excellent Anti-LID & Anti-PID Performance

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems

PERFORMANCE WARRANTY



15 Years
Product Warranty

30 Years
Linear Power Warranty

1%
First-year Degradation

0.30%
Annual Degradation 30 Years

* GL-EN-Version 2025.03.05

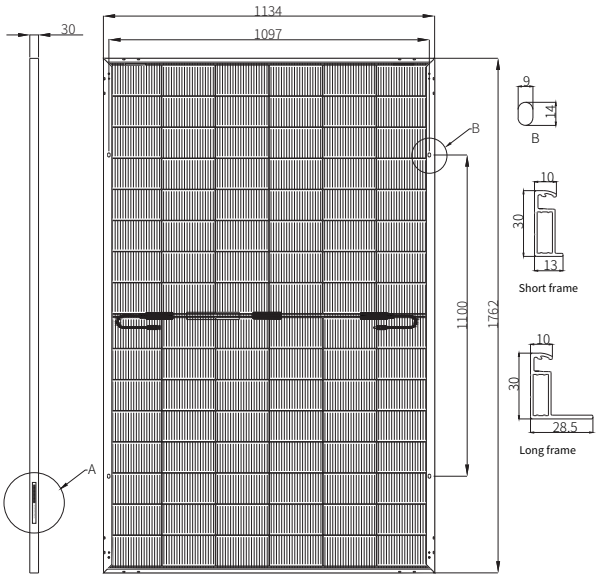
TALESUN-TH3G48M

96-Half-Cell Bifacial HJT Module

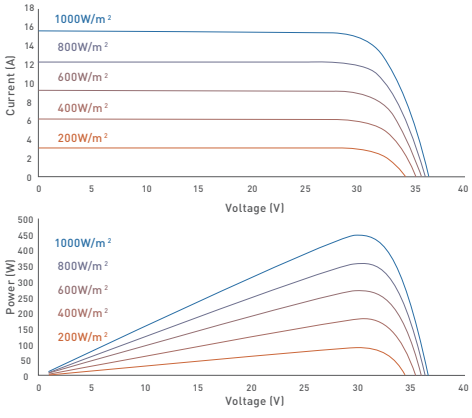
- BloombergNEF Tier 1 PV module manufacturer

Engineering Drawings

Unit: mm



I-V Curve (445W)



Temperature Coefficients

Temperature Coefficient of Pmax	-0.24%/℃
Temperature Coefficient of Voc	-0.22%/℃
Temperature Coefficient of Isc	+0.04%/℃

Operating Conditions

Nominal Operating Cell Temp.	44±2°C
Operating Temperature	-40~+85°C
Maximum System Voltage	DC1500V
Maximum Series Fuse Rating	30A
Tolerance of Pmax	0~+3%
Power Selection	0~+5W
Bifaciality	90±5%
Safety Class	Class II

Mechanical Characteristics

Cell Type	HJT
No. of Cells	96 (6x16)
Dimensions	1762x1134x30mm
Weight	21.8 kg
Junction Box	IP68
Cable	4mm²; 1250mm or customized; UV resistant
Connector	MC4 / MC4-Evo2 / MC4-Evo2A / PV-H4 / Z4S-abcd / PV-ZH202B
Frame	Anodized aluminum alloy frame
Max Static Load (front side/rear side)	5400Pa / 2400Pa
Glass	Dual glass, 1.6mm

Electrical Characteristics

STC

TALESUN-TH3G48M	440	445	450	455	460	465
Maximum Power (Pmax/W)	440	445	450	455	460	465
Module Efficiency (%)	22.0	22.3	22.5	22.8	23.0	23.3
Voltage at Pmax (Vmp/V)	30.61	30.72	30.83	30.94	31.05	31.16
Current at Pmax (Imp/A)	14.38	14.49	14.60	14.71	14.82	14.93
Open Circuit Voltage (Voc/V)	36.52	36.62	36.72	36.82	36.92	37.02
Short Circuit Current (Isc/A)	15.31	15.42	15.53	15.64	15.75	15.86

STC: AM1.5, 1000W/m², 25°C.

BNPI

Maximum Power (Pmax/W)	493	499	504	510	515	521
Voltage at Pmax (Vmp/V)	30.72	30.83	30.94	31.05	31.16	31.27
Current at Pmax (Imp/A)	16.07	16.19	16.31	16.44	16.56	16.68
Open Circuit Voltage (Voc/V)	36.65	36.75	36.85	36.95	37.05	37.15
Short Circuit Current (Isc/A)	17.17	17.29	17.42	17.54	17.66	17.79

BNPI: AM1.5, 1000W/m², 135W/m², 25°C.

NOCT

Maximum Power (Pmax/W)	335	339	343	347	351	355
Voltage at Pmax (Vmp/V)	29.23	29.34	29.45	29.55	29.65	29.76
Current at Pmax (Imp/A)	11.49	11.58	11.67	11.76	11.84	11.93
Open Circuit Voltage (Voc/V)	34.86	34.95	35.05	35.14	35.24	35.33
Short Circuit Current (Isc/A)	12.24	12.32	12.41	12.50	12.59	12.68

NOCT: AM1.5, 800W/m², 20°C, 1m/s.

Packaging

	40HQ
Modules Per Pallet	36
Pallets Per Container	26
Modules Per Container	936

TALESUN

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