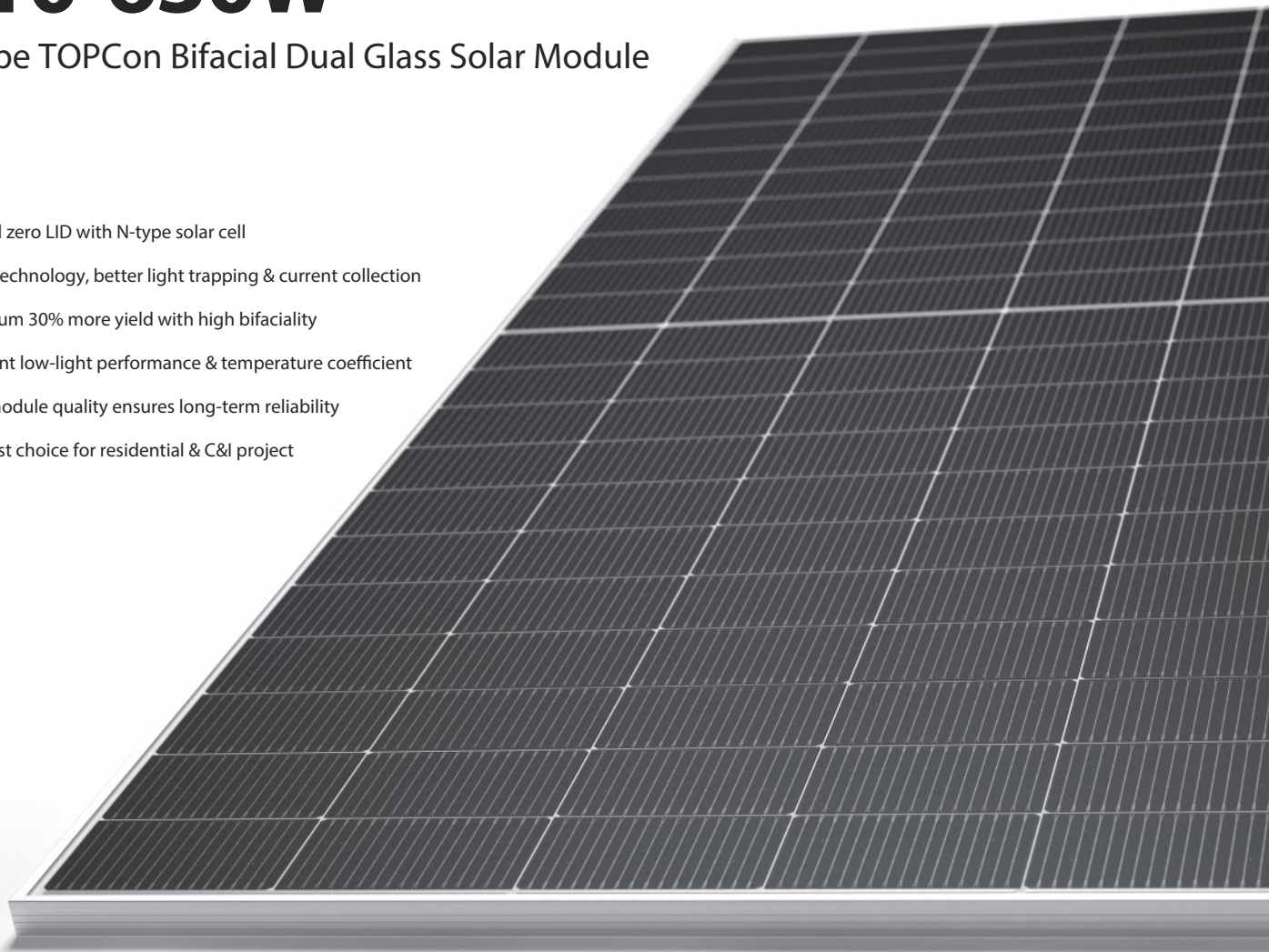


TSBHNM-132HTG

610-630W

N-type TOPCon Bifacial Dual Glass Solar Module

- Natural zero LID with N-type solar cell
- SMBB technology, better light trapping & current collection
- Maximum 30% more yield with high bifaciality
- Excellent low-light performance & temperature coefficient
- High module quality ensures long-term reliability
- The best choice for residential & C&I project



System & Product Certifications

IEC 61215 / IEC 61730

ISO 9001: Quality Management System

ISO 14001: Environment Management System

ISO 45001: Occupational Health and Safety

amfori BSCI Corporate Social Responsibility



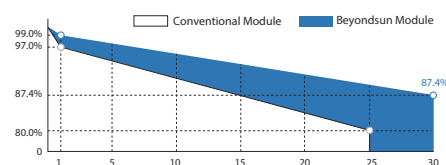
Product Warranty



15-year Warranty for
Material & Workmanship



30-year Warranty for
Linear Power Output



The Ideal Solution for



Commercial / industrial
rooftop projects



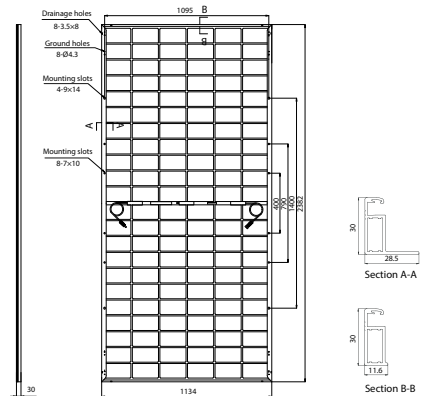
Ground-mounted
projects

N POWER (PRO) **TSBHNM-132HTG 610-630W**

Mechanical Parameters

Cell Type	N Type Mono
Cell Arrangement	132 pcs, 2×(6×11)
Dimension (L×W×H)	2382×1134×30mm
Weight	32.5kg
Front Cover	2.0mm AR Coating Tempered Glass
Back Cover	2.0mm Heat Strengthened Glass with White Grid
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable	4mm ² , +400mm, -200mm, or customizable
Connector	PV Connector

Technical Drawings (mm)



Electrical Parameters

STC: 1000W/m², 25 °C, AM 1.5 NMOT: 800W/m², AM 1.5, 20 °C, 1m/s Pmax tolerance: 0~+3%

Module Type	TSBHNM610-132HTG		TSBHNM615-132HTG		TSBHNM620-132HTG		TSBHNM625-132HTG		TSBHNM630-132HTG	
Test Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Max. Power Output Pmax (W)	610	458.7	615	462.5	620	466.2	625	470.0	630	473.8
Max. Power Voltage Vmp (V)	40.78	37.98	41.03	38.23	41.28	38.44	41.53	38.69	41.78	38.91
Max. Power Current Imp (A)	14.96	12.08	14.99	12.10	15.02	12.13	15.05	12.15	15.08	12.18
Open Circuit Voltage Voc (V)	49.02	46.57	49.31	46.84	49.60	47.12	49.89	47.40	50.18	47.67
Short Circuit Current Isc (A)	15.84	12.79	15.87	12.81	15.90	12.84	15.93	12.86	15.96	12.89
Module Efficiency (%)	22.58%		22.77%		22.95%		23.14%		23.32%	

Rear Side Power Gain

Refer. Bifaciality Factor: 80±10%

5%	Maximum Power (Pmax)	641	646	651	656	662
	Module Efficiency STC (%)	23.71%	23.91%	24.10%	24.29%	24.49%
15%	Maximum Power (Pmax)	702	707	713	719	725
	Module Efficiency STC (%)	25.97%	26.18%	26.40%	26.61%	26.82%
25%	Maximum Power (Pmax)	763	769	775	781	788
	Module Efficiency STC (%)	28.23%	28.46%	28.69%	28.92%	29.15%

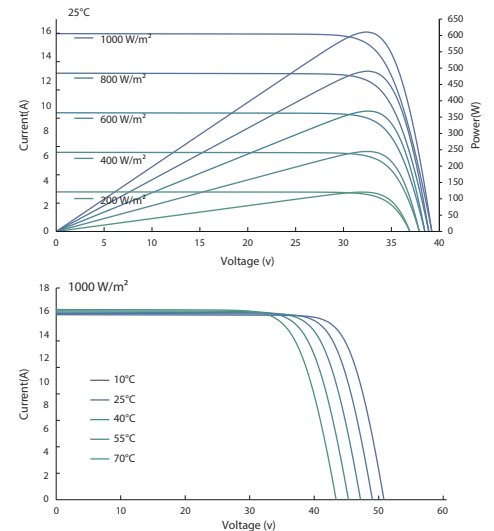
Operating Parameters

Maximum System Voltage(V)	1500(DC)
Operating Temperature(°C)	-40°C ~ +85°C
Max. Wind Load / Snow Load(Pa)	2400/5400
Max. Over Current(A)	35

Temperature Coefficients

Temperature Coefficients of Pmp	-0.29%/°C
Temperature Coefficients of Voc	-0.23%/°C
Temperature Coefficients of Isc	+0.04%/°C
NMOT	45°C±2°C

I-V Curves



Package Information

Quantity / Pallet	36 pcs
Container 40'HQ	20 pallets, 720 pcs

Partner's Notes