

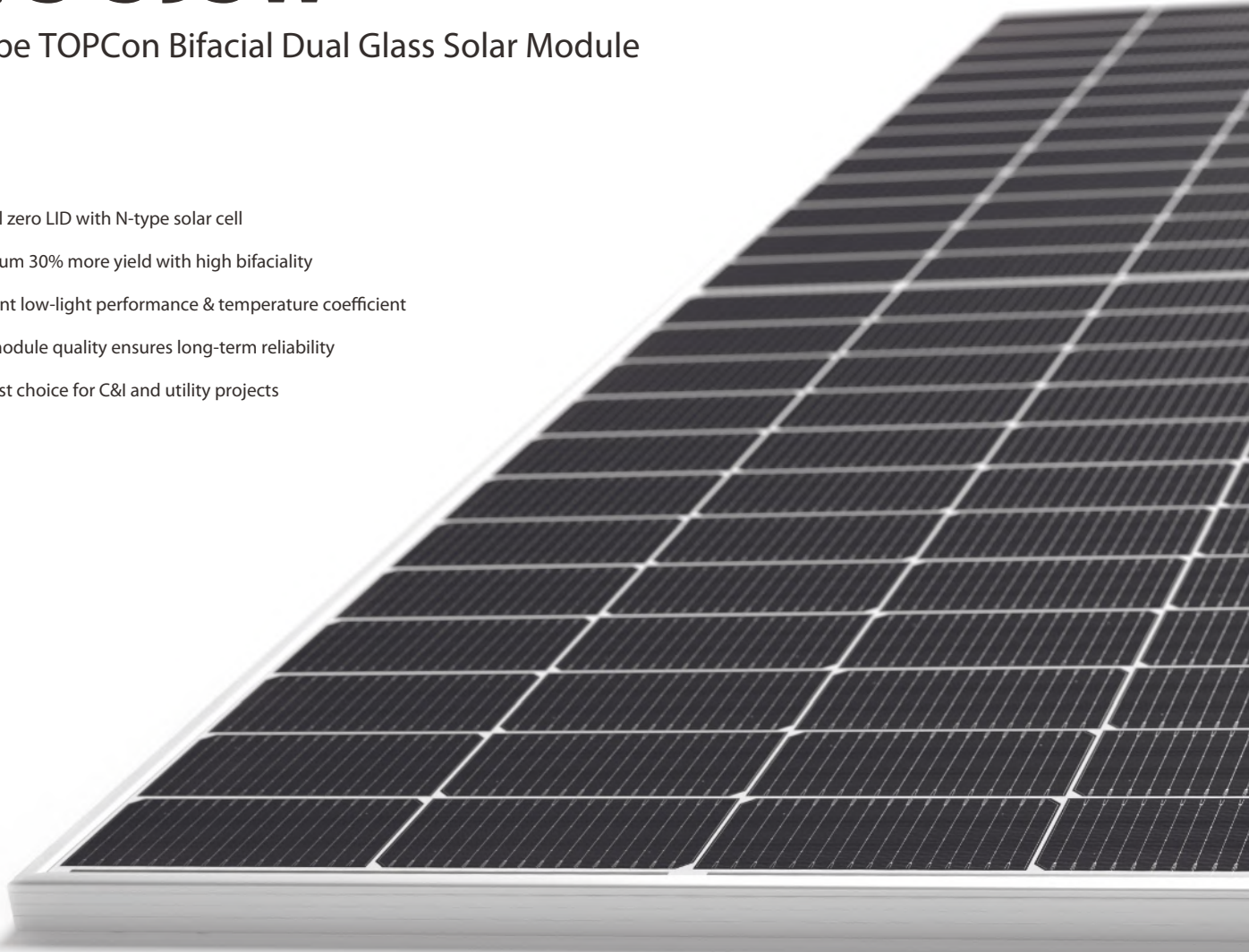


TSBHNM-144HVG

575-595W

N-type TOPCon Bifacial Dual Glass Solar Module

- Natural zero LID with N-type solar cell
- Maximum 30% more yield with high bifaciality
- Excellent low-light performance & temperature coefficient
- High module quality ensures long-term reliability
- The best choice for C&I and utility projects



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 & Insurance



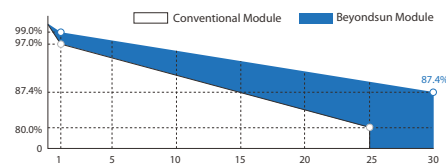
12-year Warranty for Material & Workmanship



30-year Warranty for Linear Power Output



Product & Performance Insured by LLOYD'S & PingAn



The Ideal Solution for



Residential rooftop projects



Commercial / industrial rooftop projects



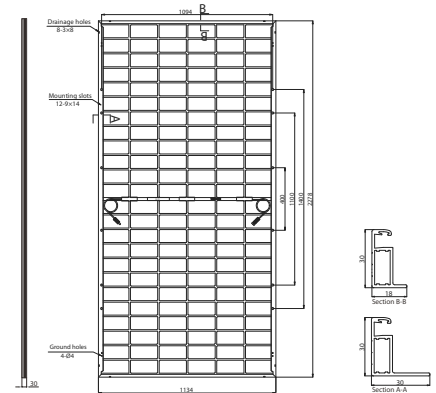
Ground-mounted projects

POWER TSBHNM-144HVG 575-595W

Mechanical Parameters

Cell Type	N-type Mono
Cell Arrangement	144pcs (2x(6x12))
Dimension (LxWxH)	2278x1134x30mm
Weight	31.5kg
Front Cover	2.0mm AR Coating Tempered Glass
Back Cover	2.0mm Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 bypass diodes
Cable	4mm ² , +400mm, -300mm, 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	TSBHNM575-144HVG		TSBHNM580-144HVG		TSBHNM585-144HVG		TSBHNM590-144HVG		TSBHNM595-144HVG	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Max. Power Output Pmax (W)	575	432	580	436	585	440	590	444	595	447
Max. Power Voltage Vmp (V)	42.69	39.67	42.84	39.82	42.99	40.04	43.13	40.19	43.28	40.28
Max. Power Current Imp (A)	13.47	10.89	13.54	10.95	13.61	10.99	13.68	11.05	13.75	11.10
Open Circuit Voltage Voc (V)	50.51	47.57	50.67	47.72	50.82	47.87	50.97	48.02	51.12	48.17
Short Circuit Current Isc (A)	14.35	11.59	14.42	11.65	14.49	11.70	14.56	11.76	14.63	11.81
Module Efficiency (%)	22.26%		22.45%		22.65%		22.84%		23.03%	

Rear Side Power Gain

Refer. Bifaciality Factor: 80±10%

5%	Maximum Power (Pmax)		609		614		620		625	
	Module Efficiency STC (%)	23.37%	23.57%	23.78%	23.98%	24.18%				
15%	Maximum Power (Pmax)		667		673		679		684	
	Module Efficiency STC (%)	25.60%	25.82%	26.04%	26.27%	26.49%				
25%	Maximum Power (Pmax)		725		731		738		744	
	Module Efficiency STC (%)	27.82 %	28.07%	28.31%	28.55%	28.79%				

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)	30

Temperature Coefficients

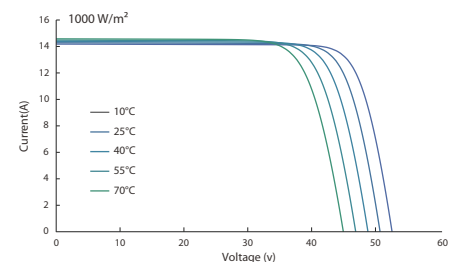
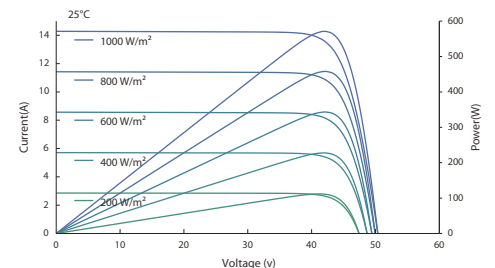
Temperature Coefficients of Pmp	-0.30%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	+0.046 %/°C
NMOT	45°C±2°C

Package Information

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

Partner's Notes

I-V Curves



*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, Zhejiang Beyondsun Green Energy Technology Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.