

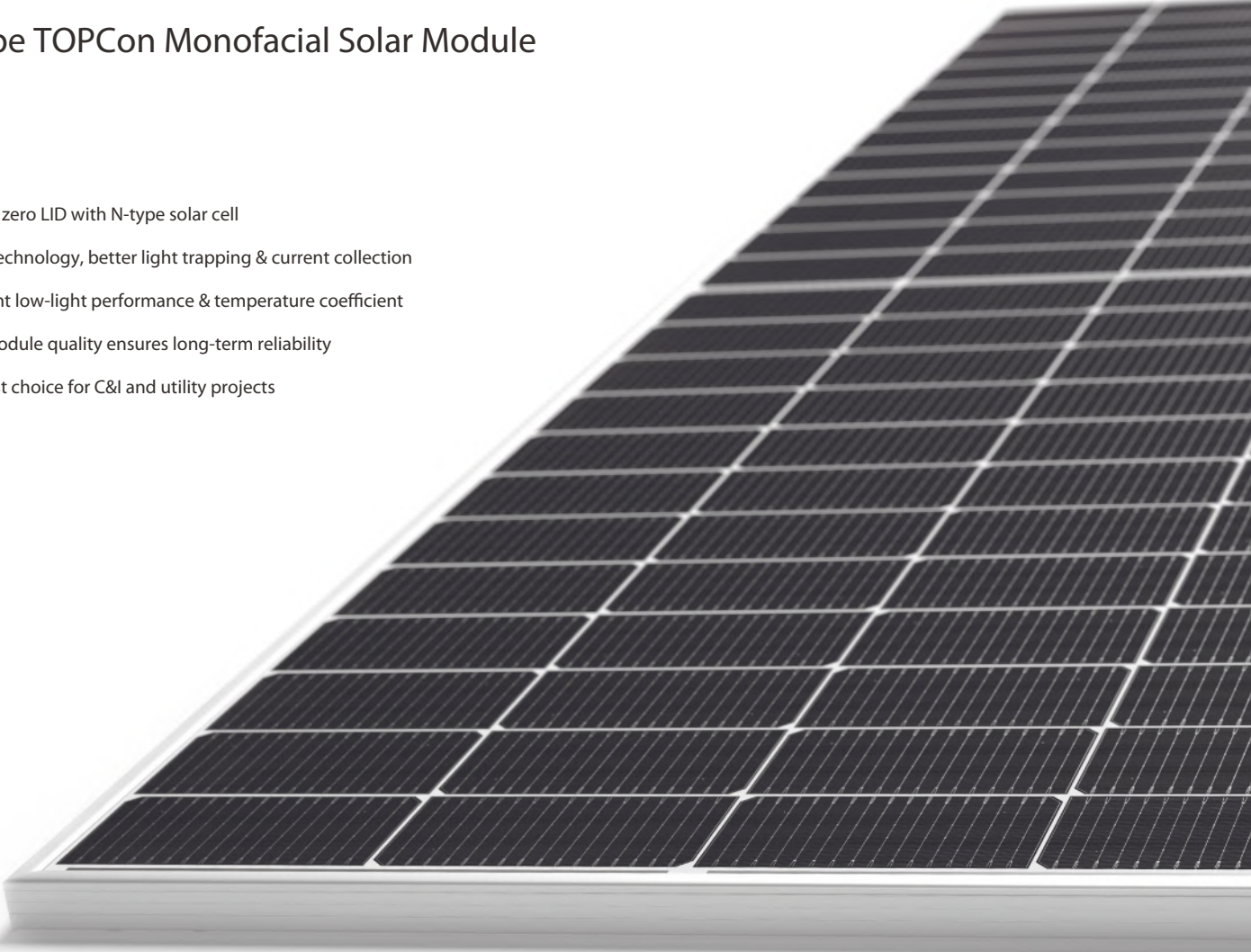


TSHNM-144HV

575-595W

N-type TOPCon Monofacial Solar Module

- Natural zero LID with N-type solar cell
- SMBB technology, better light trapping & current collection
- Excellent low-light performance & temperature coefficient
- High module quality ensures long-term reliability
- The best choice for C&I and utility projects



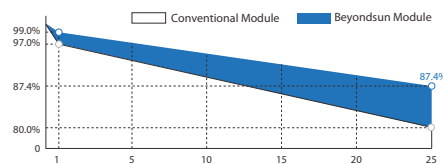
System & Product Certifications

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

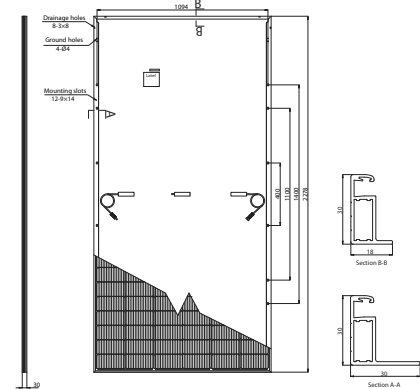
-  Residential rooftop projects
-  Commercial / industrial rooftop projects
-  Ground-mounted projects

N POWER TSHNM-144HV 575-595W

Mechanical Parameters

| | |
|-------------------|--|
| Cell Type | N Type Mono |
| Cell Arrangement | 144pcs (2×(6×12)) |
| Dimension (L×W×H) | 2278×1134×30mm |
| Weight | 28kg |
| Front Cover | 3.2mm Tempered Glass |
| Back Cover | White Back Sheet |
| 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

| Module Type | TSHNM575-144HV | TSHNM580-144HV | TSHNM585-144HV | TSHNM590-144HV | TSHNM595-144HV |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|
| Max. Power Output Pmax (W) | 575 | 580 | 585 | 590 | 595 |
| Max. Power Voltage Vmp (V) | 42.69 | 42.84 | 42.99 | 43.13 | 43.28 |
| Max. Power Current Imp (A) | 13.47 | 13.54 | 13.61 | 13.68 | 13.75 |
| Open Circuit Voltage Voc (V) | 50.51 | 50.67 | 50.82 | 50.97 | 51.12 |
| Short Circuit Current Isc (A) | 14.35 | 14.42 | 14.49 | 14.56 | 14.63 |
| Module Efficiency (%) | 22.26% | 22.45% | 22.65% | 22.84% | 23.03% |

STC: 1000W/m², 25 °C, AM 1.5 Pmax tolerance 0~+3%

Electrical Parameters @NMOT

| | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|
| Max. Power Output Pmax (W) | 432 | 436 | 440 | 444 | 447 |
| Max. Power Voltage Vmp (V) | 39.67 | 39.82 | 40.04 | 40.19 | 40.28 |
| Max. Power Current Imp (A) | 10.89 | 10.95 | 10.99 | 11.05 | 11.10 |
| Open Circuit Voltage Voc (V) | 47.57 | 47.72 | 47.87 | 48.02 | 48.17 |
| Short Circuit Current Isc (A) | 11.59 | 11.65 | 11.70 | 11.76 | 11.81 |

NMOT: 800W/m², AM 1.5, 20°C, 1m/s

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) | 25 |

Temperature Coefficients

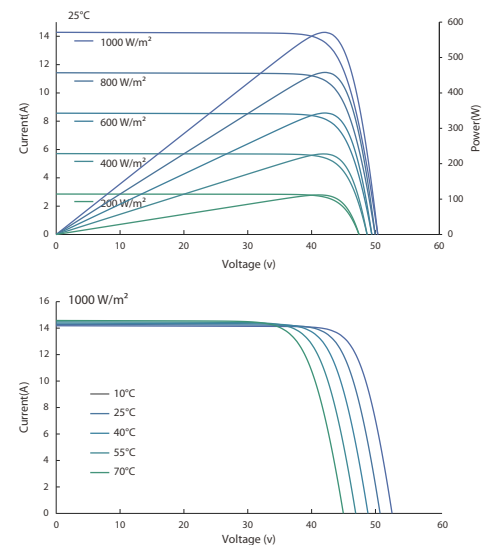
| | |
|---------------------------------|-------------|
| Temperature Coefficients of Pmp | -0.30%/°C |
| Temperature Coefficients of Voc | -0.25%/°C |
| Temperature Coefficients of Isc | +0.046 %/°C |
| NMOT | 45°C±2°C |

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.