# OYUNGSOLAR

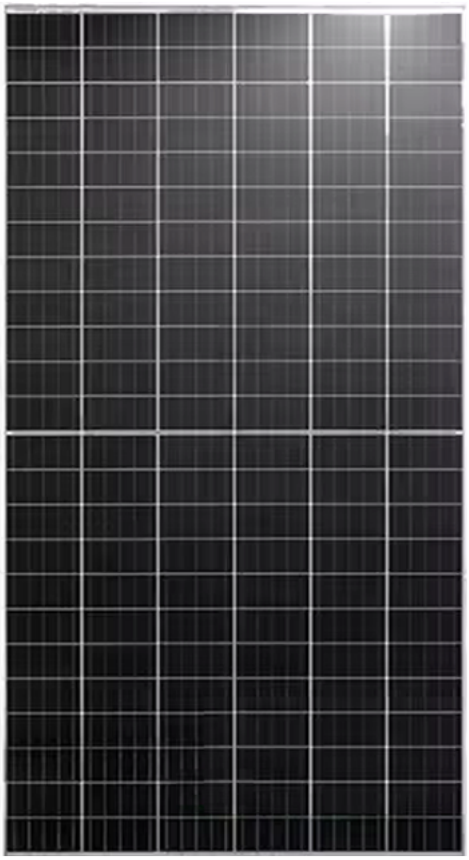
## OSM72NTM

## 580-605 Watt

## HALF CELL

## N-Type TOPCon

## MONOFACIAL MODULE



### N-Type Technology

N-Type modules with Tunnel Oxide Passivating Contacts (TOPcon) technology offer lower LID/LeTID degradation and better low light performance.

### HOT 3.0 Technology

N-type modules with HOT 3.0 technology offer better reliability and efficiency.

### Dual-Sided Power Generation

Dual-sided power generation gain increases with backside exposure to light, significantly reducing LCOE.

### Mechanical Load Enhanced

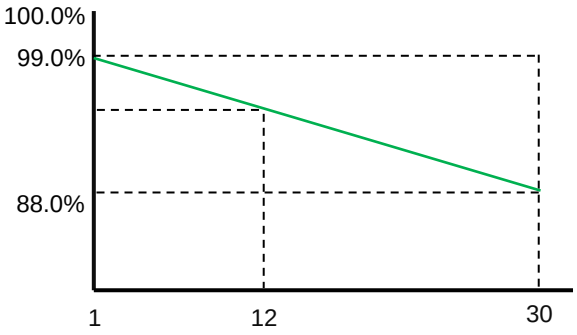
Certified to withstand: 5400 Pa front side max static test load 2400 Pa rear side max static test load

### SMBB Technology

Better light trapping and current collection to improve module power output and reliability.

### Anti-PID Guarantee

Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.




**12**years Product Warranty

**30**years Linear Power Warranty

**1.0**% First-year Degradation

**0.40**% Annual Degradation Over 30 Years

IEC61215:2021 / IEC61730:2023
IEC61701 / IEC62716 / IEC60068 / IEC62804
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018: Occupational health and safety management systems

OSM72NTM 580-605

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## Mechanical Parameters

| | |
|---|---|
| Cell Type | N-type TOPCon |
| No. of cells | 144 (72×2) |
| Dimension | 2278×1134×30mm |
| Weight | 27.0kg |
| Front Glass | 3.2 mm, anti-reflection coating |
| Frame | anodized aluminium alloy |
| Junction Box | IP68 rated |
| Protection Class | Class II |
| IEC Fire Type | Class C |
| Output Cables | 4.0mm$^2$, (+): 400mm, (-): 200mm, or customized length |

## Packaging Configuration

| | |
|---|---|
| Pallet Dimensions | 2308×1120×1249 mm |
| Packing Detail | 36 pcs/pallets, 720 pcs/ 40'HC |

## Specifications (STC)

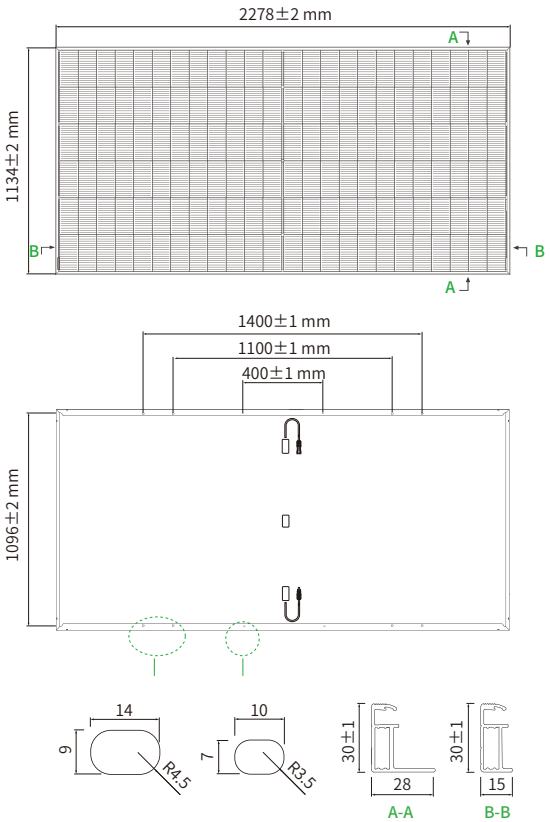
| | | | | | | |
|---|---|---|---|---|---|---|
| Maximum Power (Pmax/W) | 580 | 585 | 590 | 595 | 600 | 605 |
| Maximum Power Voltage (Vmp/V) | 43.35 | 43.53 | 43.71 | 43.88 | 44.06 | 44.23 |
| Maximum Power Current (Imp/A) | 13.38 | 13.44 | 13.50 | 13.56 | 13.62 | 13.68 |
| Open-circuit Voltage (Voc/V) | 52.31 | 52.47 | 52.63 | 52.79 | 52.95 | 53.11 |
| Short-circuit Current (Isc/A) | 14.01 | 14.07 | 14.13 | 14.19 | 14.25 | 14.31 |
| Module Efficiency (STC/%) | 22.45 | 22.65 | 22.84 | 23.03 | 23.23 | 23.42 |
| Power Tolerance | 0~3% | | | | | |
| Temperature Coefficients of Pmax | -0.29%/°C | | | | | |
| Temperature Coefficients of Voc | -0.25%/°C | | | | | |
| Temperature Coefficients of Isc | 0.045%/°C | | | | | |

STC: Irradiance 1000W/m$^2$, Cell Temperature 25°C, AM=1.5

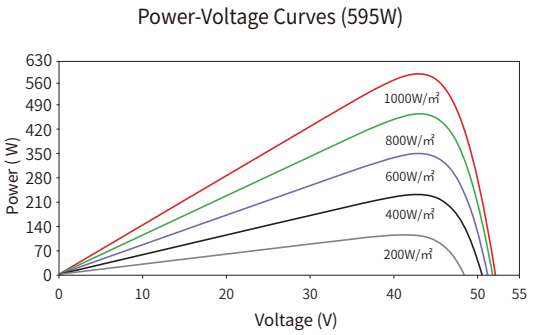
## Application Conditions

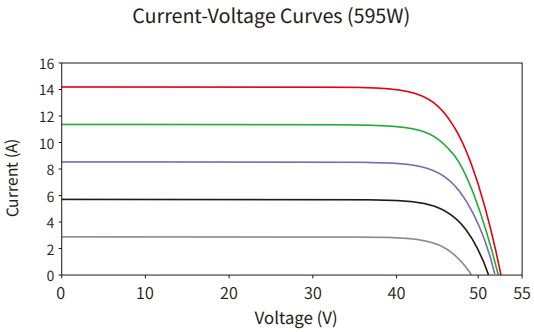
| | |
|---|---|
| Operating Temperature | -40°C ~ +70°C |
| Maximum System Voltage | 1000/1500 VDC (IEC) |
| Maximum Series Fuse Rating | 25A |

## Engineering Drawings




## Electrical Performance

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