



# VOLT X N-type VXNH570-590-72-B8 570-590 Watt

BIFACIAL MODULE  
Dual Glass  
HOT 3.0 Technology

N-Type

## Outstanding Visual Appearance

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components

## Durability Against Extreme Environment

- High salt mist and ammonia resistance.

## SMBB Technology

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

## Anti-PID Guarantee

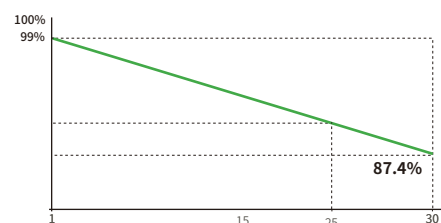
- Minimizes the chance of degradation caused by PID phenomena through optimization of cell production technology and material control.

## Ultra-low Degradation, longer warranty, higher output

- First-year degradation 1% and annual degradation at 0.4%
- Up to 12 years product warranty and 30 years power warranty
- Lower temperature coefficient (-0.29 %/°C) and operating temperature

## Universal solution for residential and C&I rooftops

- Easy for integration, designed for compatibility with existing mainstream inverters and diverse mounting systems
- Perfect size and low weight for handling and installation
- Most valuable solution on low load capacity rooftops (weight similar to backsheet version)
- Mechanical performance up to 5400 Pa positive load and 4000 Pa negative load



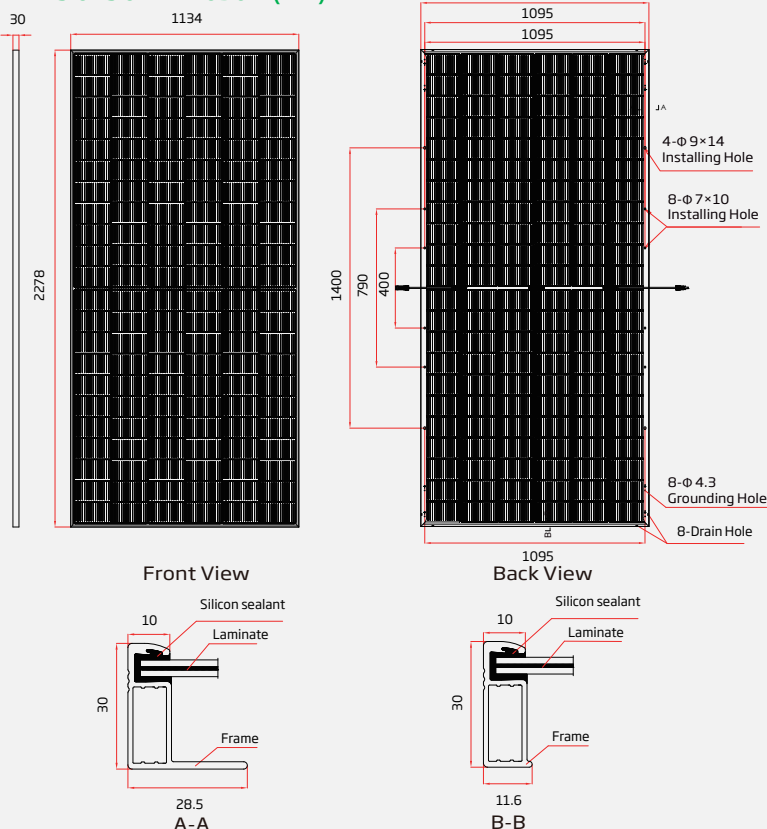
|                                    |   |                                     |   |
|------------------------------------|---|-------------------------------------|---|
| <b>12 Year</b><br>Product Warranty | <b>30 Year</b><br>Linear Power Warranty | <b>1%</b><br>First-year Degradation | <b>0.4%</b><br>Annual Degradation Over 30 Years |
|------------------------------------|---|-------------------------------------|---|

- IEC61215 (2016) / IEC61730 (2016)
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems

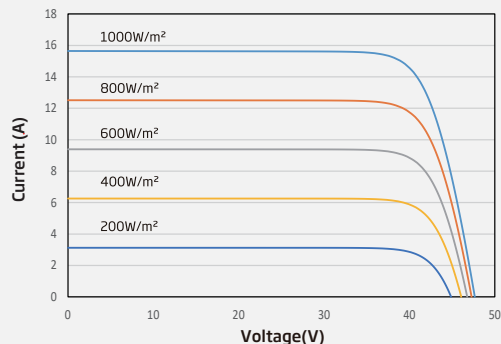


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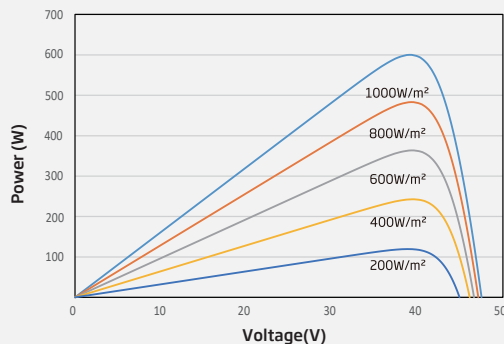
## DIMENSIONS OF PV MODULE(mm)



## I-V CURVES OF PV MODULE ( 600 W)



## P-V CURVES OF PV MODULE ( 600 W)



## ELECTRICAL DATA (STC)

|  |        |       |       |       |       |
|--|--------|-------|-------|-------|-------|
| Peak Power Watts-P <sub>MAX</sub> (Wp)*    | 570    | 575   | 580   | 585   | 590   |
| Power Tolerance-P <sub>MAX</sub> (W)       | 0 ~ +5 |       |       |       |       |
| Maximum Power Voltage-V <sub>MPP</sub> (V) | 43.58  | 43.73 | 43.88 | 44.02 | 44.17 |
| Maximum Power Current-I <sub>MPP</sub> (A) | 13.08  | 13.15 | 13.22 | 13.29 | 13.36 |
| Open Circuit Voltage-V <sub>OC</sub> (V)   | 52.10  | 52.30 | 52.50 | 52.70 | 52.90 |
| Short Circuit Current-I <sub>SC</sub> (A)  | 13.83  | 13.89 | 13.95 | 14.01 | 14.07 |
| Module Efficiency η <sub>m</sub> (%)       | 22.07  | 22.26 | 22.45 | 22.65 | 22.84 |

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM=1.5. \*Measuring tolerance: ±3%.

## Specifications (NOCT)

|  |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|
| Maximum Power-P <sub>MAX</sub> (Wp)        | 430   | 433   | 437   | 441   | 445   |
| Maximum Power Voltage-V <sub>MPP</sub> (V) | 40.56 | 40.73 | 40.89 | 41.05 | 41.21 |
| Maximum Power Current-I <sub>MPP</sub> (A) | 10.59 | 10.64 | 10.69 | 10.74 | 10.79 |
| Open Circuit Voltage-V <sub>OC</sub> (V)   | 49.49 | 49.68 | 49.87 | 50.06 | 50.25 |
| Short Circuit Current-I <sub>SC</sub> (A)  | 11.16 | 11.21 | 11.26 | 11.31 | 11.36 |

NOCT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

## MECHANICAL DATA

|                      |   |
|----------------------|---|
| Solar Cells          | Monocrystalline   |
| No. of cells         | 144 cells   |
| Module Dimensions    | 2278×1134×30 mm (89.69×44.65×1.18 inches)   |
| Weight               | 31.0kg (68.34 lb)   |
| Front Glass          | 2.0 mm, Anti-Reflection Coating   |
| Encapsulant material | GLASS POE/EVA   |
| Back Glass           | 2.0 mm, Heat Strengthened Glass   |
| Frame                | 30mm (1.18 inches) Anodized Aluminium Alloy   |
| J-Box                | IP 68 rated   |
| Cables               | Photovoltaic Technology Cable 4.0mm² (0.006 inches²),<br>Portrait: 350/280 mm(13.78/11.02 inches)<br>Length can be customized |
| Connector            | MC4 EV02 / TS4 PLUS / TS4*  |

\*Please refer to regional datasheet for specified connector.

## TEMPERATURE RATINGS

|   |             |
|---|-------------|
| NOCT(Nominal Operating Cell Temperature)    | 43°C (±2°C) |
| Temperature Coefficient of P <sub>MAX</sub> | -0.29%/°C   |
| Temperature Coefficient of V <sub>OC</sub>  | -0.24%/°C   |
| Temperature Coefficient of I <sub>SC</sub>  | 0.04%/°C    |

## MAXIMUM RATINGS

|                         |                |
|-------------------------|----------------|
| Operational Temperature | -40~+85°C      |
| Maximum System Voltage  | 1500V DC (IEC) |
| Max Series Fuse Rating  | 25A            |

## WARRANTY

|                                     |
|-------------------------------------|
| 12year Product Workmanship Warranty |
| 30 year Power Warranty              |
| 1% first year degradation           |
| 0.4% Annual Power Attenuation       |

(Please refer to product warranty for details)

## PACKAGING CONFIGURATION

|                                       |
|---------------------------------------|
| Modules per box: 36 pieces            |
| Modules per 40' container: 720 pieces |

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NOTE: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in this datasheet are subject to change without notice.