

# STAR Pro SERIES N-TOPCon 144-cell MODULE

EG-590NT72-HLV

**570~590W**

0~3% POSITIVE TOLERANCE

## KEY FEATURES



### SMBB cell design

Super multi Busbar cells bring lower resistance and increased Busbar reflectance ensures higher power output



### Low degradation

Adopt N-Type TOPCon cell technology, lower degradation and better temperature co-efficiency, greatly increased on generation performance



### High Reliability

Strict in-house testing in PV Lab which is CNAS approved & TUV /VDE certified



### Excellent Low-light Performance

Advanced solar cell and glass surface texturing technology allows for excellent performance in low-light environments



### PID Resistant

Excellent PID resistance performance optimized by unique structural design

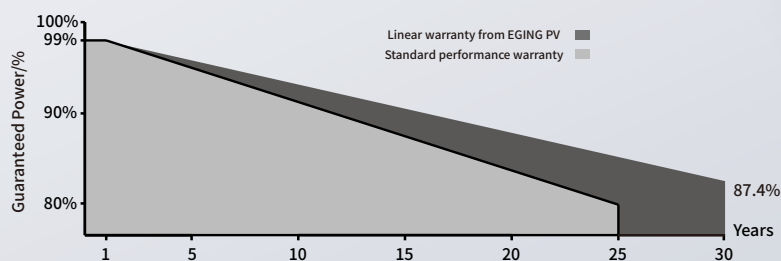
## LINEAR PERFORMANCE WARRANTY



15 year Product Warranty  
25 Year Product Warranty  
(Optional, special for rooftop market)



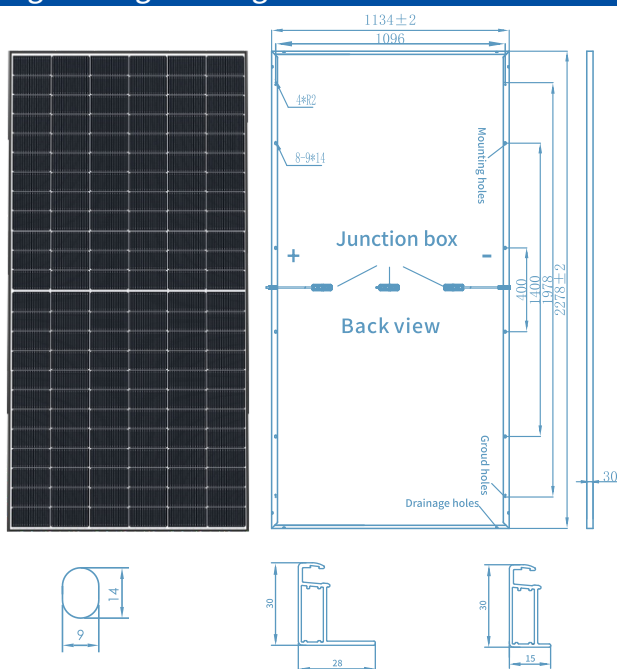
30 Year Linear Power Warranty



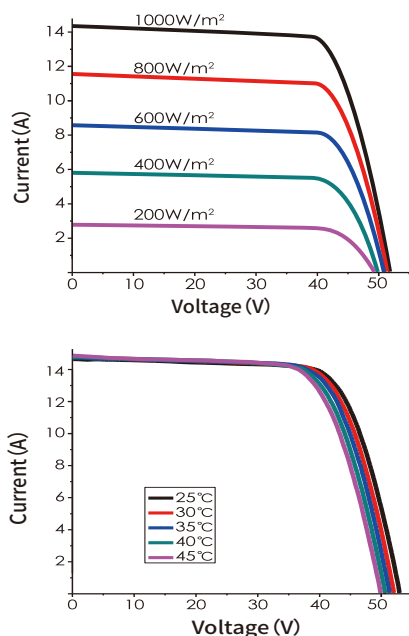
As a BloombergNEF Tier 1 and global leading manufacturer since 1998, EGING PV is committed to supplying reliable and durable PV products to customers to create together a greener planet.

# EG-590NT72-HLV

## Engineering Drawings



## I-V Curves



## Packing Configuration

|                        |                |
|------------------------|----------------|
| Pieces per pallet      | 36             |
| Size of packing (mm)   | 2320*1135*1255 |
| Weight of packing (kg) | 1022           |
| Pieces per container   | 720            |
| Size of container      | 40' HC         |

## Electrical Characteristics

|                                     |       |       |       |       |       |
|-------------------------------------|-------|-------|-------|-------|-------|
| Power level                         | 570   | 575   | 580   | 585   | 590   |
| Pmax (W)                            | 570   | 575   | 580   | 585   | 590   |
| Vmp (V)                             | 42.17 | 42.35 | 42.53 | 42.71 | 42.88 |
| Imp (A)                             | 13.52 | 13.58 | 13.64 | 13.70 | 13.76 |
| Voc (V)                             | 51.00 | 51.15 | 51.30 | 51.45 | 51.62 |
| Isc (A)                             | 14.31 | 14.37 | 14.43 | 14.49 | 14.55 |
| Module efficiency (%)               | 22.1  | 22.3  | 22.5  | 22.6  | 22.8  |
| Maximum system voltage (V)          | 1500  |       |       |       |       |
| Fuse Rating (A)                     | 25    |       |       |       |       |
| Temperature coefficient Pmax (%/°C) | -0.29 |       |       |       |       |
| Temperature coefficient Isc (%/°C)  | 0.046 |       |       |       |       |
| Temperature coefficient Voc (%/°C)  | -0.24 |       |       |       |       |

STC:Irradiance 1000W/m²,module temperature 25°C,AM=1.5

## Working Characteristics

|                     |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|
| Power level         | 570   | 575   | 580   | 585   | 590   |
| Pmax (W)            | 429   | 432   | 436   | 441   | 445   |
| Vmp (V)             | 39.47 | 39.49 | 39.61 | 39.88 | 40.06 |
| Imp (A)             | 10.87 | 10.94 | 11.01 | 11.06 | 11.11 |
| Voc (V)             | 48.15 | 48.28 | 48.41 | 48.55 | 48.70 |
| Isc (A)             | 11.52 | 11.59 | 11.65 | 11.70 | 11.75 |
| Power tolerance (%) | 0~+3  |       |       |       |       |
| NOCT (°C)           | 44±2  |       |       |       |       |

NOCT:Conditions:Irradiance 800W/m²,ambient temperature 20°C, wind speed 1m/s

## Mechanical Characteristics

|                         |                         |
|-------------------------|-------------------------|
| Number of cells         | 144pcs                  |
| Size of cell (mm)       | 182*91                  |
| Type of cell            | N-type Mono             |
| Thickness of glass (mm) | 3.2                     |
| Type of frame           | Anodized aluminum alloy |
| Junction box            | IP68                    |
| Size of module (mm)     | 2278*1134*30            |
| Weight (kg)             | 27                      |
| Cables/connectors       | 4mm², MC4 compatible    |
| Length of Cable         | Portrait: +300mm/-300mm |

## Maximum Ratings

|                           |                                      |
|---------------------------|--------------------------------------|
| Operating Temperature(°C) | -40~85                               |
| Operating humidity(%RH)   | 5~85                                 |
| Allowable Hail Load       | 25mm ice-ball with velocity of 23m/s |

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CAUTION:All rights and explain reserved by EGING PV.  
Specifications included in this datasheet are subject to change without notice.  
The specific content of the product warranty refers to EGING's latest warranty.



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