

# STAR Pro SERIES N-TOPCon 108-cell MODULE

EG-440NT54-HLV(black)

**420~440W**

0~3%POSITIVE TOLERANCE

## KEY FEATURES



**SMBB cell design**  
Super multi Busbar cells brings 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



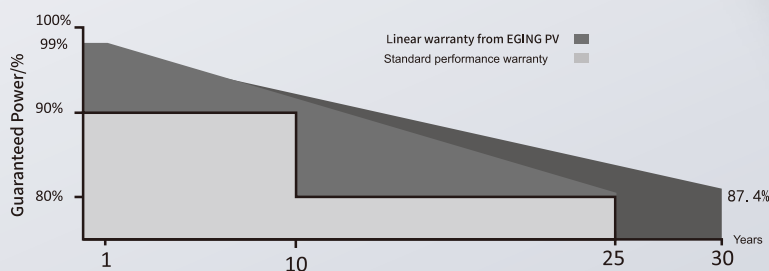
**Excellent Low-light Performance**  
Advanced solar cell and glass surface texturing technology allows for excellent performance in low-light environments



**PID Resistant**  
Excellent PID resistance performance optimized by unique structural design

## LINEAR PERFORMANCE WARRANTY

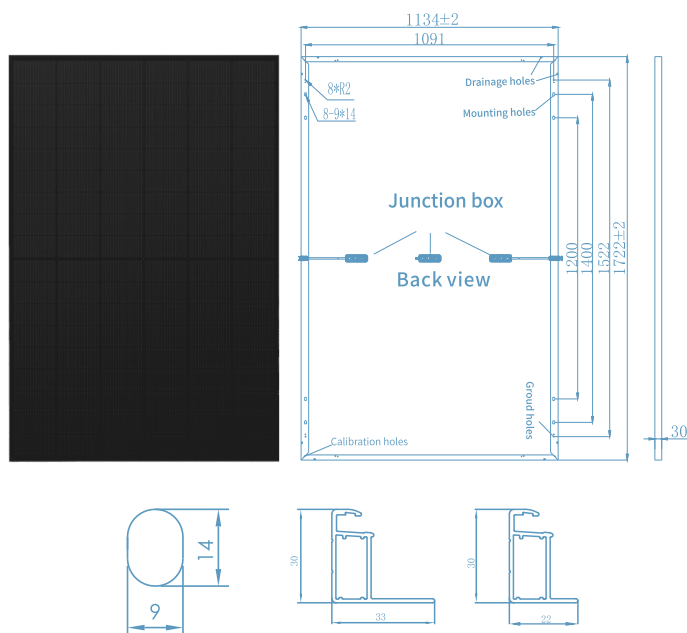
**25 Year Product Warranty** **30 Year Linear Power Warranty**



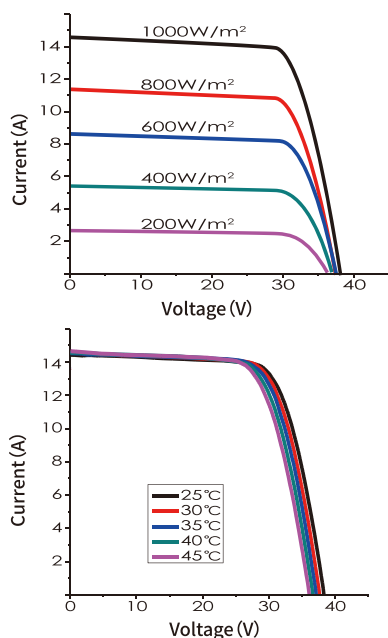
As a BloombergNEF Tier 1 and global leading manufacturer since 1998,EGING PV is committed to supplying reliable and durable PV products to customers to create together a greener planet.

# EG-440NT54-HLV(black)

## Engineering Drawings



## I-V Curves



## Packing Configuration

|                        |                |
|------------------------|----------------|
| Pieces per pallet      | 36             |
| Size of packing (mm)   | 1750*1135*1255 |
| Weight of packing (kg) | 772            |
| Pieces per container   | 936            |
| Size of container      | 40' HC         |

## Electrical Characteristics

|                                     |       |       |       |       |       |
|-------------------------------------|-------|-------|-------|-------|-------|
| Power level                         | 420   | 425   | 430   | 435   | 440   |
| Pmax (W)                            | 420   | 425   | 430   | 435   | 440   |
| Vmp (V)                             | 31.51 | 31.70 | 31.88 | 32.06 | 32.24 |
| Imp (A)                             | 13.33 | 13.41 | 13.49 | 13.57 | 13.65 |
| Voc (V)                             | 38.08 | 38.26 | 38.44 | 38.62 | 38.80 |
| Isc (A)                             | 14.08 | 14.16 | 14.24 | 14.32 | 14.4  |
| Module efficiency (%)               | 21.5  | 21.8  | 22.0  | 22.3  | 22.5  |
| 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         | 420   | 425   | 430   | 435   | 440   |
| Pmax (W)            | 316   | 320   | 323   | 327   | 331   |
| Vmp (V)             | 29.37 | 29.55 | 29.61 | 29.73 | 29.88 |
| Imp (A)             | 10.76 | 10.83 | 10.91 | 11.00 | 11.08 |
| Voc (V)             | 36.17 | 36.35 | 36.53 | 36.75 | 36.86 |
| Isc (A)             | 11.37 | 11.43 | 11.50 | 11.6  | 11.7  |
| 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         | 108pcs                  |
| 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)     | 1722*1134*30            |
| Weight (kg)             | 20.2                    |
| Cables/connectors       | 4mm², MC4 compatible    |
| Length of Cabel         | Portrait: +300mm/-300mm |

## Maximum Ratings

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

