

STAR Pro SERIES N-TOPCon 144-cell MODULE BIFACIAL

EG-590NT72-HL/BF-DG

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

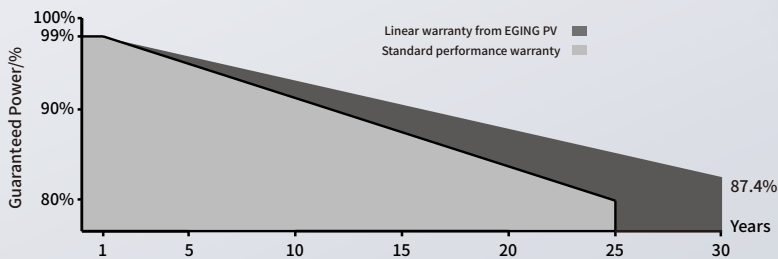


PID Resistant

Excellent PID resistance performance optimized by unique structural design

LINEAR PERFORMANCE WARRANTY

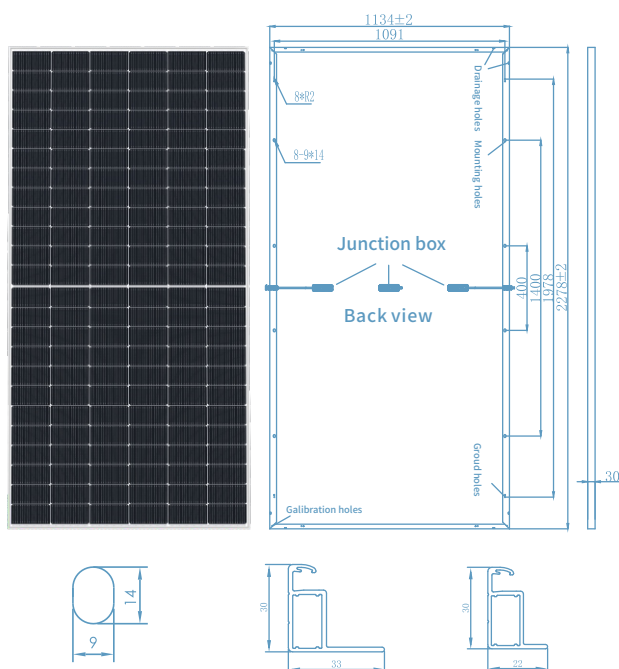
15 Year Product Warranty **30** Year Linear Power Warranty



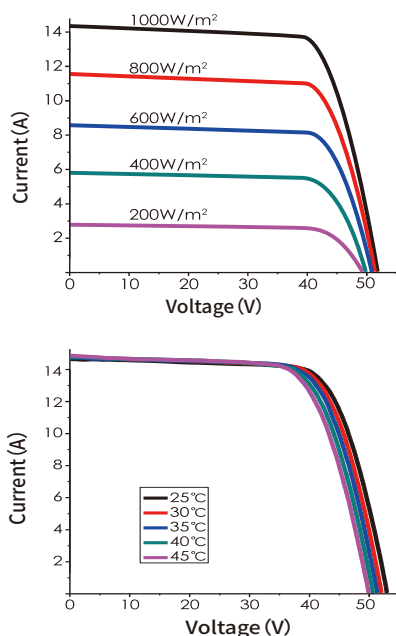
As a BloombergNEF Tier 1 and global leading manufacturer since 1998, EGING PV is committed to supplying reliable and durable PV products to customers to create together a greener planet.

EG-590NT72-HL/BF-DG

Engineering Drawings



I-V Curves



Packing Configuration

Pieces per pallet	36
Size of packing (mm)	2320*1135*1255
Weight of packing (kg)	1186
Pieces per container	720
Size of container	40' HC

Electrical Characteristics(STC)

Power level	570	575	580	585	590
Pmax (W)	570	575	580	585	590
Vmp (V)	42.35	42.53	42.71	42.89	43.07
Imp (A)	13.46	13.52	13.58	13.64	13.70
Voc (V)	51.06	51.24	51.42	51.60	51.78
Isc (A)	14.25	14.31	14.37	14.43	14.49
Module efficiency (%)	22.1	22.3	22.5	22.6	22.8
Maximum system voltage (V)	1500				
Fuse Rating (A)	30				
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

Bifacial Output-Backside Power Gain

10%	Pmax(W)	627	632	638	644	649
	Module efficiency (%)	24.3	24.5	24.7	24.9	25.1
20%	Pmax(W)	684	690	696	702	708
	Module efficiency (%)	26.5	26.7	26.9	27.2	27.4

Working Characteristics(NOCT)

Power level	570	575	580	585	590
Pmax (W)	429	432	436	441	445
Vmp (V)	39.73	39.78	39.90	40.10	40.28
Imp (A)	10.80	10.86	10.93	11.00	11.05
Voc (V)	48.54	48.73	48.92	49.14	49.32
Isc (A)	11.49	11.54	11.59	11.64	11.69
Power tolerance (%)	0~+3				
NOCT (°C)	44±2				

NOCT: Conditions: Irradiance 800 W/m^2 , ambient temperature 20°C , wind speed 1 m/s

Working Characteristics (BNPI)

Pmax (W)	631	637	642	648	653
Voc (V)	51.07	51.27	51.44	51.62	51.78
Isc (A)	15.79	15.86	15.92	15.98	16.05
Tolerance (%)	Pmax: ±3% Binning: ±5W Voc: ±5% Isc: ±5%				

BNPI:Front Irradiance1000W/m²,Rear Irradiance 135W/m², module temperature25°C, AM=1.5
Bifaciality:Pmax80%±10%,φVoc98%±2%,φIsc80%±10%

Mechanical Characteristics

Number of cells	144pcs
Size of cell (mm)	182*91
Type of cell	N-type Mono
Thickness of glass (mm)	2.0
Type of frame	Anodized aluminum alloy
Junction box	IP68
Size of module (mm)	2278*1134*30
Weight (kg)	31.9
Cables/connectors	4mm ² , 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



Tel: 86-519-82585880
Zip: 213213
Add: No.18, Jinwu Road, Jintan Dist,
Changzhou City, Jiangsu Province.
Email: marketing@egingpv.com
Web: www.egingpv.com

Revised in October 2024 1st Edition*

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.