

STAR Pro SERIES N-TOPCon 144-cell MODULE BIFACIAL

EG-590NT72-HL/BF-DG **590W** EG-595NT72-HL/BF-DG **595W**

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



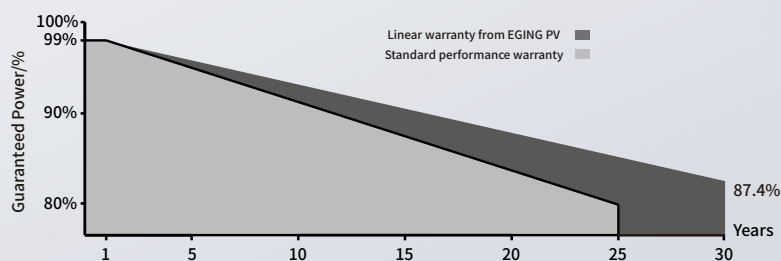
Excellent Low-light Performance
Advanced solar cell and glass surface texturing technology allows for excellent performance in low-light environments



PID Resistant
Excellent PID resistance performance optimized by unique structural design

LINEAR PERFORMANCE WARRANTY

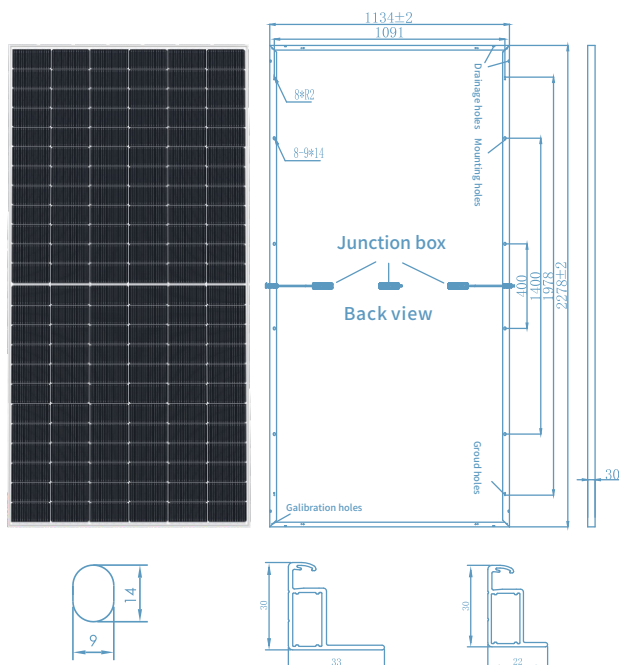
15 15 Year Product Warranty **30** 30 Year Linear Power Warranty



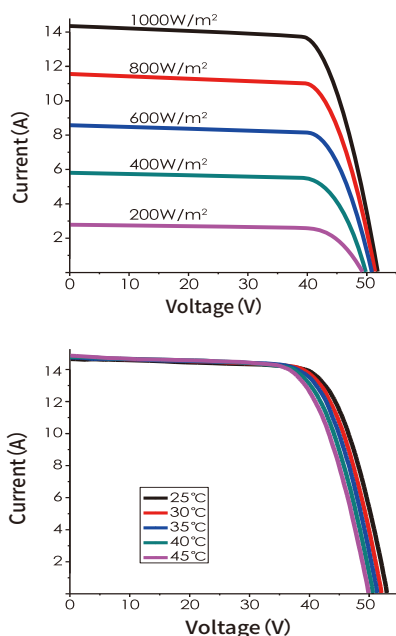
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EG-590NT72-HL/BF-DG EG-595NT72-HL/BF-DG

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	590	595
Pmax (W)	590	595
Vmp (V)	43.07	43.25
Imp (A)	13.70	13.76
Voc (V)	51.78	51.96
Isc (A)	14.49	14.55
Module efficiency (%)	22.8	23.03
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
Tolerance	Pmax:±3% Binning:0~+5W Voc:±5% Isc:±5%	

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

Bifacial Output-Backside Power Gain

10%	Pmax(W)	649	655
	Module efficiency (%)	25.1	25.4
20%	Pmax(W)	708	714
	Module efficiency (%)	27.4	27.6

Working Characteristics (NOCT)

Power level	590	595
Pmax (W)	445	448
Vmp (V)	40.28	40.47
Imp (A)	11.05	11.10
Voc (V)	49.32	49.53
Isc (A)	11.69	11.74
Tolerance	Pmax:±3% Binning:0~+5W Voc:±5% Isc:±5%	
NOCT (°C)	44±2	

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

Working Characteristics (BNPI)

Pmax (W)	653	659
Voc (V)	51.78	51.97
Isc (A)	16.05	16.12
Tolerance	Pmax:±3% Binning:0~+5W Voc:±5% Isc:±5%	
BNPI: Front Irradiance1000W/m², Rear Irradiance 135W/m², moduletemperature25°C, AM=1.5		
Bifaciality:Pmax80%±10%,φIsc80%±10%,φVoc98%±2%		

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	
Connectors	E1-X-abcd	Changzhou Eging Photovoltaic Tech. Co., Ltd.
-manufacture	Z4S-abcd	Zerun Co. Ltd.
	C2xyz	Jiangsu Holsun Electronics Technology Co., Ltd.
	PV-HT03x	Jiangsu Haitian Microelectronics Corp.
	PV-KST4-EVO2/xy_UR	Staubli Electrical Connectors AG
	PV-KBT4-EVO2/xy_UR	
Length of Cable	+300mm/-300mm	
Fire rating	Class c	
Country of manufacture	China	

Maximum Ratings

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

Revised in November 2024 1st Edition

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Specifications included in this datasheet are subject to change without notice.

The specific content of the product warranty refers to EGING's latest warranty.



Add: Changzhou Eging
Photovoltaic Technology Co., Ltd.
No.18,Jinwu Road
Yaotang Town
213212 JINTAN CITY
Jiangsu
CHINA
Tel:86-519-82585880
Email:marketing@egingpv.com
Web: www.egingpv.com

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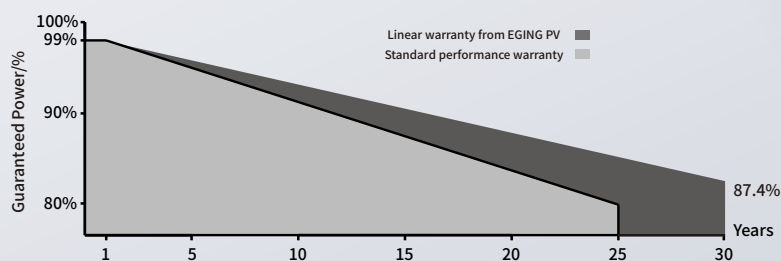
LINEAR PERFORMANCE WARRANTY



15 year Product Warranty
25 Year Product Warranty
(For rooftop installation only)

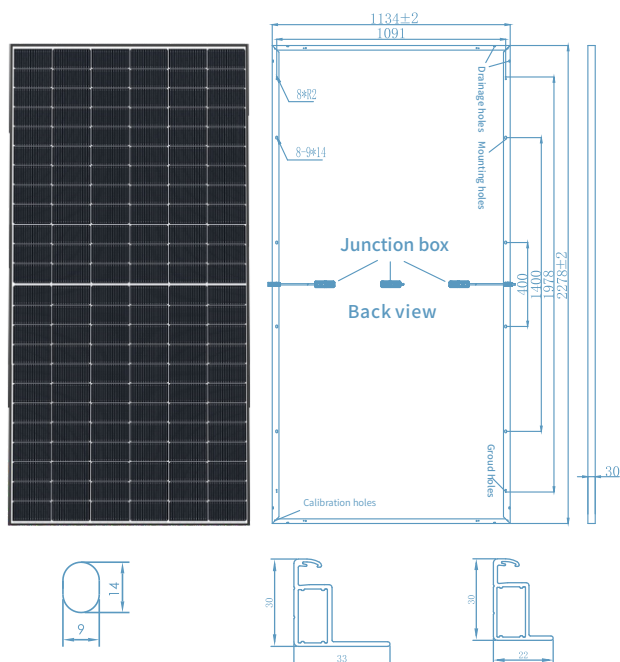


30 Year Linear Power Warranty

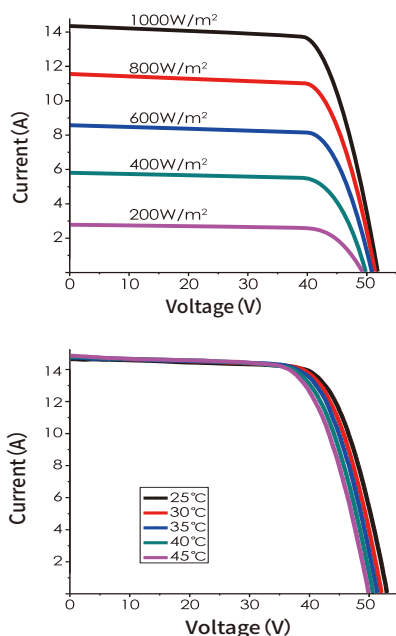


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I-V Curves



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Length of Cable	+300mm/-300mm	
Fire rating	Class c	
Country of manufacture	China	

Maximum Ratings

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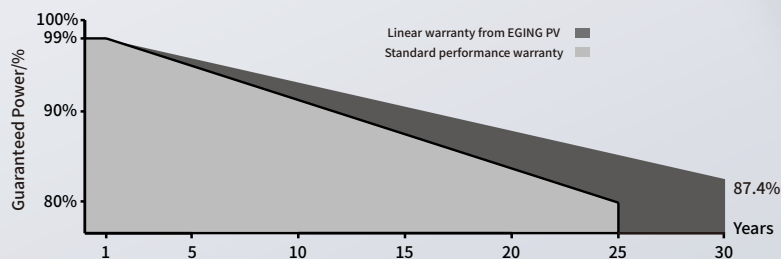
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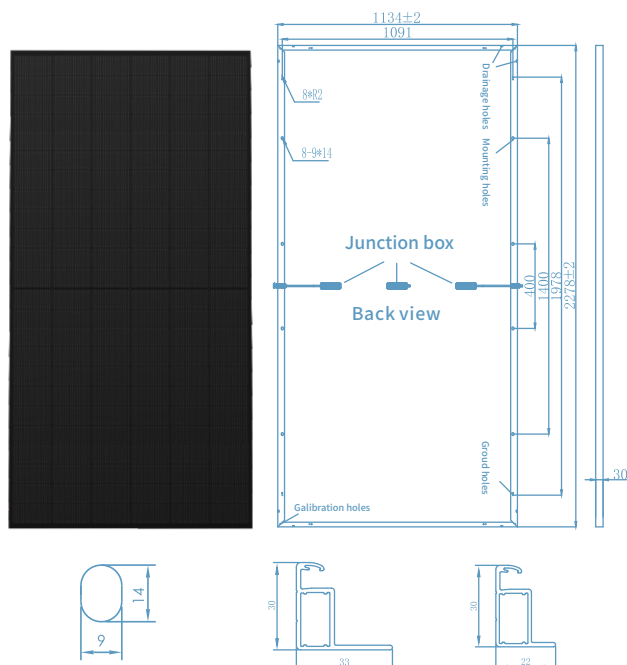
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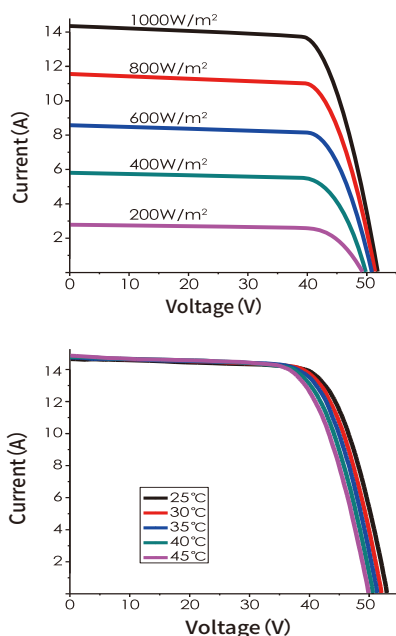
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