KEENSTAR EGING PV

STAR Pro+ SERIES

N-TOPCon
108-cell MODULE

EG-440NT54-HRb/BF-DG **440W** EG-445NT54-HRb/BF-DG **445W** EG-450NT54-HRb/BF-DG **450W**
EG-455NT54-HRb/BF-DG **455W** EG-460NT54-HRb/BF-DG **460W** EG-465NT54-HRb/BF-DG **465W**
EG-470NT54-HRb/BF-DG **470W** EG-475NT54-HRb/BF-DG **475W**

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-effeciency, greatly increased on generation performance

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

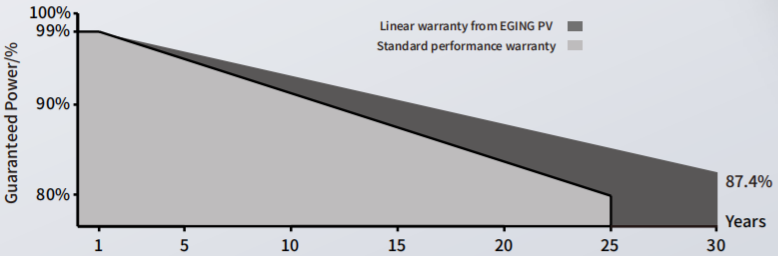
PID Resistant
Excellent PID resistance performance optimized by unique structural design

Lower LCOE
Super lower LCOE

LINEAR PERFORMANCE WARRANTY

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

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 creat together a greener planet.

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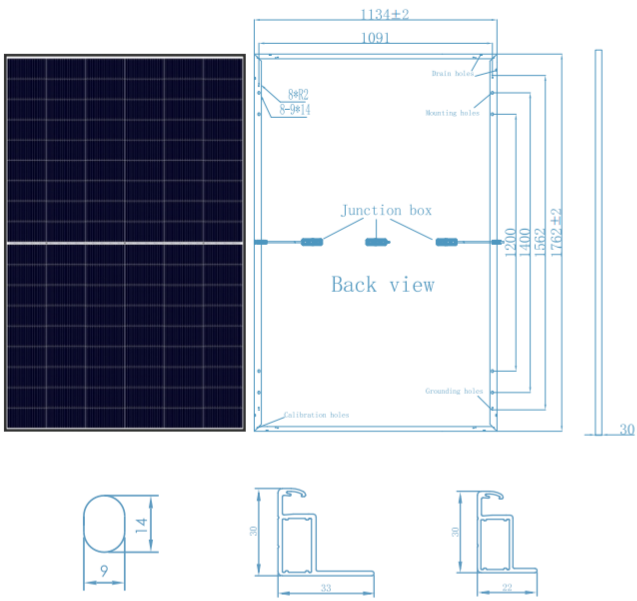
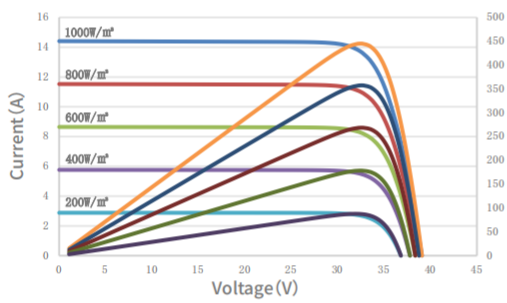
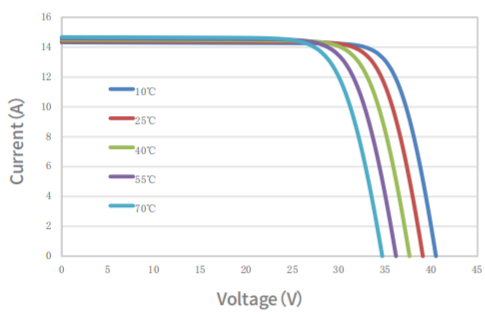
EGING PV KEENSTAR

Engineering Drawings



I-V Curves





Packing Configuration

Pieces per pallet	36
Size of packing (mm)	1790*1130*1255
Weight of packing (kg)	796
Pieces per container	936
Size of container	40'HC

Electrical Characteristics(STC)

Power level	440	445	450	455	460	465	470	475
Pmax (W)	440	445	450	455	460	465	470	475
Vmp (V)	32.48	32.65	32.83	33.00	33.17	33.34	33.51	33.68
Imp (A)	13.55	13.63	13.71	13.79	13.87	13.95	14.03	14.11
Voc (V)	38.88	39.08	39.28	39.48	39.68	39.88	40.08	40.28
Isc (A)	14.32	14.41	14.49	14.57	14.65	14.73	14.81	14.89
Module efficiency (%)	22.0	22.3	22.5	22.8	23.0	23.3	23.5	23.8
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							
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)	484	490	495	501	506	512	517	523
	Module efficiency (%)	24.2	24.5	24.8	25.1	25.3	25.6	25.9	26.1
20%	Pmax(W)	528	534	540	546	552	558	564	570
	Module efficiency (%)	26.4	26.7	27.0	27.3	27.6	27.9	28.2	28.5

Working Characteristics (NOCT)

Power level	440	445	450	455	460	465	470	475
Pmax (W)	333	337	341	345	348	352	356	360
Vmp (V)	30.40	30.60	30.70	30.90	31.10	31.2	31.4	31.6
Imp (A)	10.96	11.03	11.09	11.15	11.21	11.27	11.33	11.39
Voc (V)	36.70	36.90	37.10	37.30	37.50	37.7	37.9	38.0
Isc (A)	11.55	11.62	11.68	11.75	11.81	11.87	11.94	12.00
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)	487	493	498	504	509	515	521	526
Voc (V)	38.89	39.09	39.29	39.49	39.69	39.89	40.09	40.28
Isc (A)	15.87	15.97	16.05	16.14	16.23	16.32	16.41	16.50
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	108pcs	
Size of cell (mm)	182.2*94	
Type of cell	N-type Mono	
Thickness of glass (mm)	1.6	
Type of frame	Anodized aluminum alloy	
Junction box	IP68	
Size of module (mm)	1762*1134*30	
Weight (kg)	21	
Connectors -manufacture	E1-X-abcd	Changzhou Eging Photovoltaic Tech. Co., Ltd.
	Z4S-abcde	Zerun Co. Ltd.
	C2xyz	Jiangsu Holysun 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

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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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