EcoGreenEnergy

EGE-450-470W-96N(GM10R)
EN.V.24.B

N TOPCon

450-470W

M10R / 210mm Cell - 96 Half-cells

KEY FEATURES

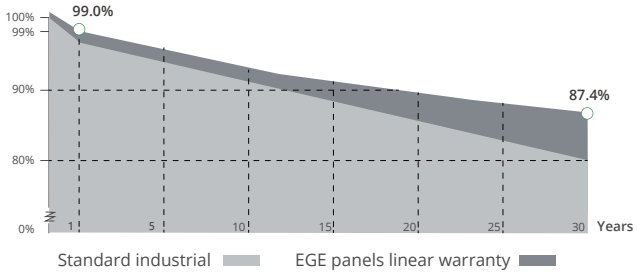
- Outstanding Power Generation
- Anti PID/ Low LID protection
- Lower temperature coefficient
- Less Hot Spot Shading effects
- Enhanced Bifaciality Factor
- Exceptional Mechanical Resistance

23.52% Maximum Efficiency	**0~+5W** Positive Power Tolerance
470W Maximum Power Output	**GRADE A** Cells Guaranteed

LINEAR PERFORMANCE WARRANTY

PRODUCT 25 YEARS WARRANTY

LINEAR POWER 30 YEARS WARRANTY



COMPREHENSIVE CERTIFICATES

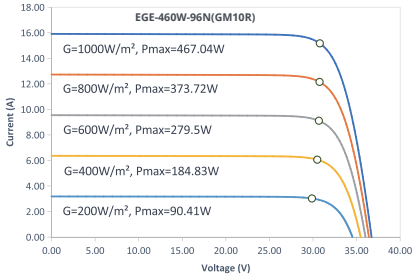
IEC 61215 / 61730 / 62716 / 61701 / 60068-2-68

ISO 9001 / 14001 / 45001

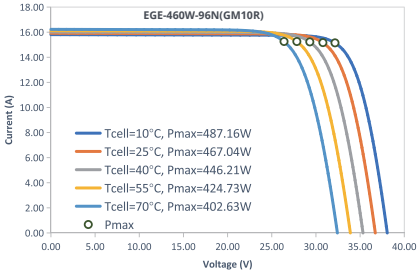
450-470W Bifacial Double Glass ATLAS TOPCon

Characteristics

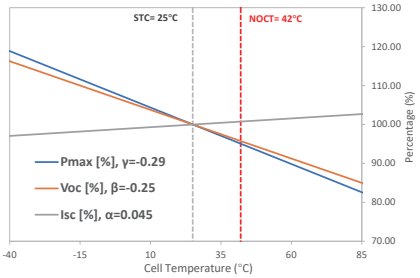
IV-Curves Irradiance



IV-Curves Temperature



Temperature Dependence of Isc,Voc,Pmax



Electrical Characteristics (STC: E=1000W/m² - Tcell=25˚C - AM1.5 NOCT: E=800W/m² - T=20˚C - v=1m/s BNPI*)

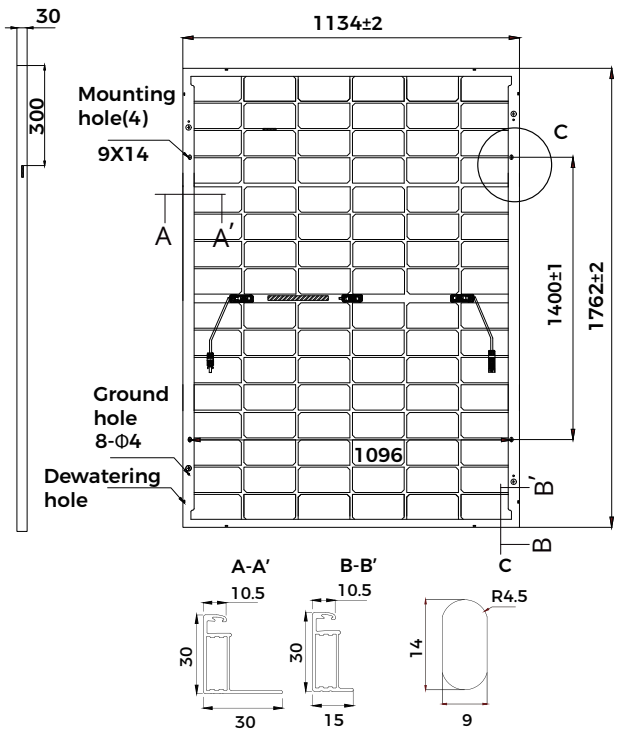
Module Type	EGE-450W-96N(GM10R)			EGE-455W-96N(GM10R)			EGE-460W-96N(GM10R)			EGE-465W-96N(GM10R)			EGE-470W-96N(GM10R)		
	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI
Power output (Pmax)	450 W	359.47 W	503.54 W	455 W	362.39 W	507.59 W	460 W	368.20 W	515.73 W	465 W	371.16 W	521.05W	470 W	373.82 W	524.78 W
Maximum power voltage (Vmp)	30.62 V	24.17 V	30.62 V	30.91 V	24.29 V	30.91 V	31.34 V	24.55 V	31.34 V	31.35 V	24.69 V	31.35 V	31.53 V	24.83 V	31.53 V
Maximum power current (Imp)	14.84 A	14.88 A	16.44 A	14.82 A	14.92 A	16.42 A	14.85 A	15.00 A	16.45 A	15.00 A	15.03 A	16.62 A	15.02 A	15.00 A	16.65 A
Open circuit voltage (Voc)	34.75 V	27.20 V	34.75 V	34.90 V	27.23 V	34.90 V	35.14 V	27.34 V	35.14 V	34.81 V	27.41 V	34.81 V	34.91 V	27.49 V	34.91 V
Short circuit current (Isc)	15.88 A	15.75 A	17.60 A	15.90 A	15.75 A	17.62 A	15.91 A	15.75 A	17.63 A	15.72 A	15.76 A	17.42 A	15.73 A	15.76 A	17.42 A
BSI Isc		19.69 A			19.72A			19.73 A			19.49 A			19.50 A	
Bifaciality Factor	85 % ± 10 %														
Power tolerance	0~+5 W														
Module efficiency		22.52 %			22.77 %			23.02 %			23.27 %			23.52 %	

* BNPI = Bifacial NamePlate Irradiance

Mechanical Characteristics

Cell type	Monocrystalline
Number of cells	96 (6x16)
Dimensions	1762x1134x30mm
Weight	24.2 kg
Glass	2.0mm (front) / 2.0mm (rear), tempered glass, AR coated
Frame	Anodized aluminium alloy
Junction box	IP68 rated, 3 bypass diodes
Cable	4.0 mm², 300 mm (+)/ 300 mm (-): Length can be customized
Connector	MC4, MC4 Evo2 compatible

Engineering Drawings



Operating Condition

Operating temperature range	-40æ~+85æ
Max system voltage (IEC)	1500 VDC
Max series fuse rating	30 A
Max front load (e.g.: snow)	5400 Pa
Max back load (e.g.: wind)	2400 Pa

Packaging (Dimensions of pallet: 1790*1125*1259mm)

Type	Quantity	Weight
Per Pallet	36 pcs	950.4 kg
40ft HQ Container	936 pcs	24.71 t

EcoGreenEnergy

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