EcoGreenEnergy

EGE-435-455W-108N(GM10)
EN.V.24.B

N TOPCon

435-455W

M10 / 182mm Cell - 108 Half-cells

KEY FEATURES

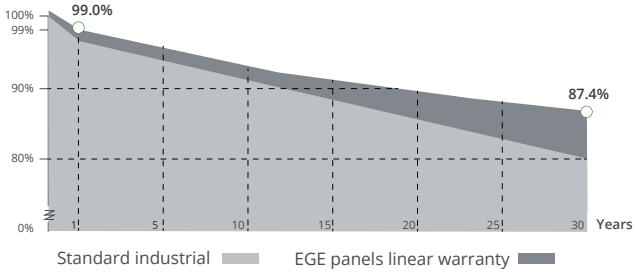
- Outstanding Power Generation
- Anti PID/ Low LID protection
- Lower temperature coefficient
- Less Hot Spot Shading effects
- Enhanced Bifaciality Factor
- Exceptional Mechanical Resistance

23.30% Maximum Efficiency	**0~+5W** Positive Power Tolerance
455W Maximum Power Output	**GRADE A** Cells Guaranteed

LINEAR PERFORMANCE WARRANTY

PRODUCT 25 YEARS WARRANTY

LINEAR POWER 30 YEARS WARRANTY



COMPREHENSIVE CERTIFICATES

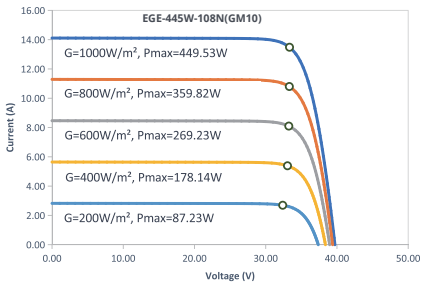
IEC 61215 / 61730 / 62716 / 61701 / 60068-2-68
ISO 9001 / 14001 / 45001

435-455W Bifacial Double Glass

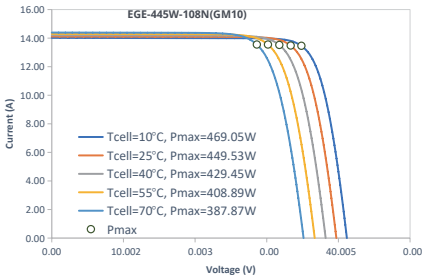
ATLAS TOPCon

Characteristics

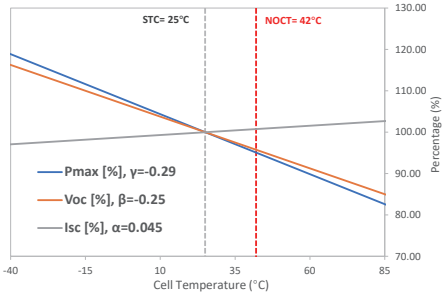
IV-Curves Irradiance



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-435W-108N(GM10)			EGE-440W-108N(GM10)			EGE-445W-108N(GM10)			EGE-450W-108N(GM10)			EGE-455W-108N(GM10)		
	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI
Power output (Pmax)	435 W	346.07 W	489.73 W	440 W	351.59 W	493.58 W	445 W	354.73 W	497.98 W	450 W	357.16 W	501.39 W	455 W	361.49 W	505.51 W
Maximum power voltage (Vmp)	32.97 V	25.89 V	32.97 V	33.06 V	26.03 V	33.06 V	33.16 V	26.11 V	33.16 V	33.26 V	26.19 V	33.26 V	33.35 V	26.30 V	33.35 V
Maximum power current (Imp)	13.41 A	13.37 A	14.85 A	13.48 A	13.51 A	14.93 A	13.55 A	13.58 A	15.02 A	13.61 A	13.64 A	15.08 A	13.68 A	13.75 A	15.16 A
Open circuit voltage (Voc)	38.43 V	30.19 V	38.43 V	38.51 V	30.33 V	38.51 V	38.62 V	30.41 V	38.62 V	38.71 V	30.49 V	38.71 V	38.81 V	30.60 V	38.81 V
Short circuit current (Isc)	13.97 A	13.93 A	15.47 A	14.04 A	14.07 A	15.55 A	14.11 A	14.14 A	15.64 A	14.18 A	14.21 A	15.71 A	14.26 A	14.32 A	15.80 A
BSI Isc		17.32 A			17.40 A			17.50 A			17.59 A			17.68 A	
Bifaciality Factor	85 % ± 10 %														
Power tolerance	0~+5 W														
Module efficiency		22.28 %			22.53 %			22.79 %			23.04 %			23.30%	

* BNPI = Bifacial NamePlate Irradiance

Mechanical Characteristics

Cell type	Monocrystalline (182x91 mm)
Number of cells	108 (6x18)
Dimensions	1722x1134x30mm
Weight	24.8 kg
Glass	2.0mm (front) / 2.0mm (rear), tempered glass, AR coated
Frame	Anodized aluminium alloy
Junction box	IP68 rated (3 by pass diodes)
Cable	4.0 mm², 300 mm (+)/ 300 mm (-): Length can be customized
Connector	MC4, MC4 Evo2 compatible

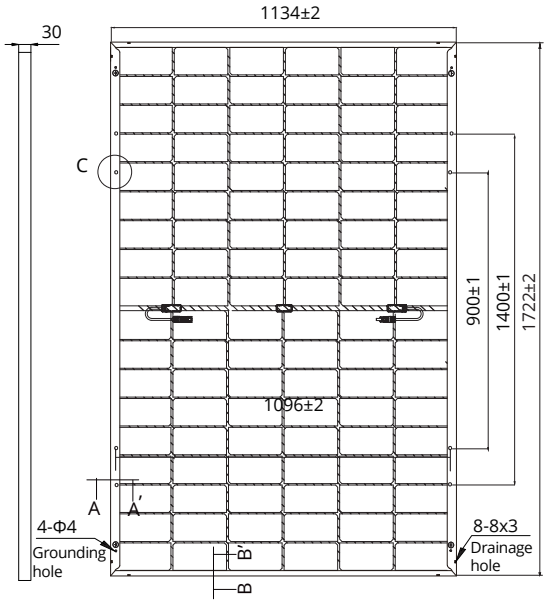
Operating Condition

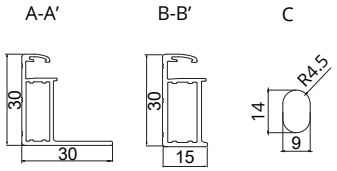
Operating temperature range	-40°C~+85°C
Max system voltage (IEC)	1500 VDC
Max series fuse rating	30 A
Max front load (e.g.: snow)	5400 Pa
Max back load (e.g.: wind)	2400 Pa

Packaging (Dimensions of pallet: 1755*1125*1259mm)

Type	Quantity	Weight
Per Pallet	36 pcs	926.8 kg
40ft HQ Container	936 pcs	24.10 t

Engineering Drawings





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