







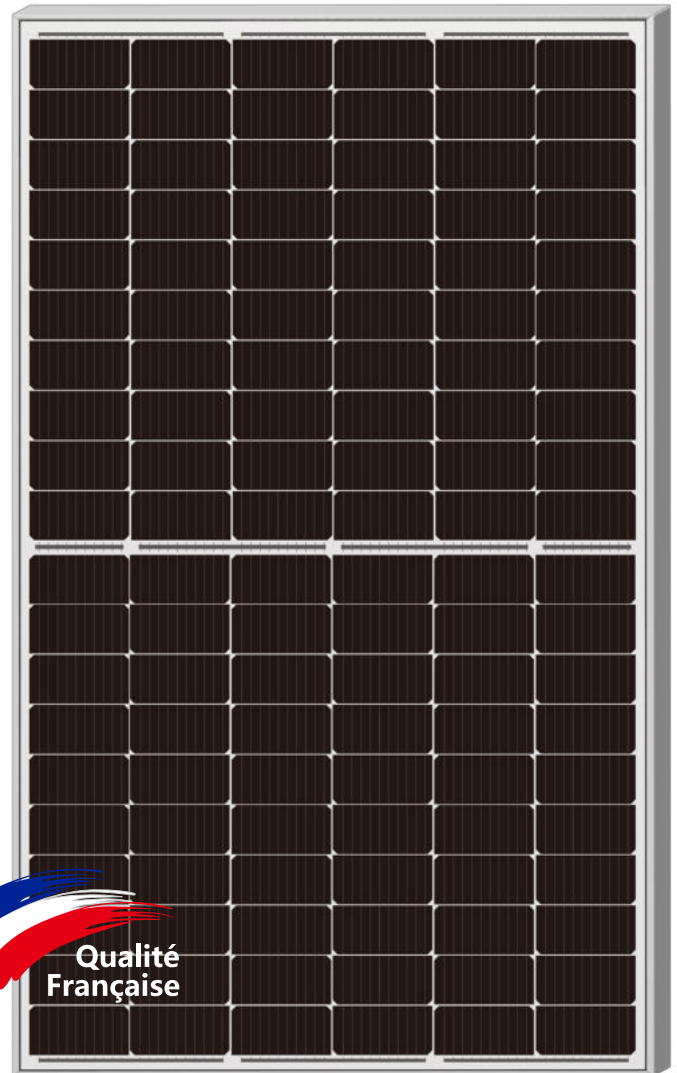
# ATLAS

## 440-460W

M10 / 182mm Cell - 120 Half-cells

### KEY FEATURES

-  Outstanding Power Generation
-  Anti PID/ Low LID protection
-  Lower temperature coefficient
-  Less Hot Spot Shading effects



**21.24%**  
Maximum Efficiency

**0~+5W**  
Positive Power Tolerance

**460W**  
Maximum Power Output

**GRADE A**  
Cells Guaranteed

### COMPREHENSIVE CERTIFICATES

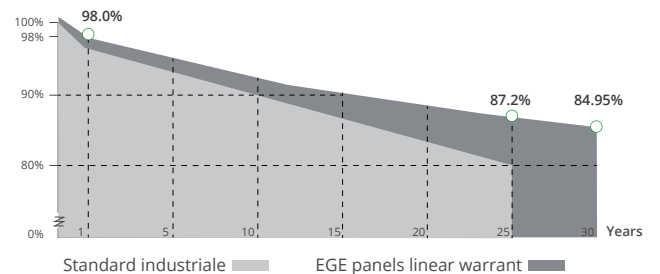
IEC 61215 / 61730 / 62716 / 61701 / 60068-2-68  
ISO 9001 / 14001 / 45001



### LINEAR PERFORMANCE WARRANTY

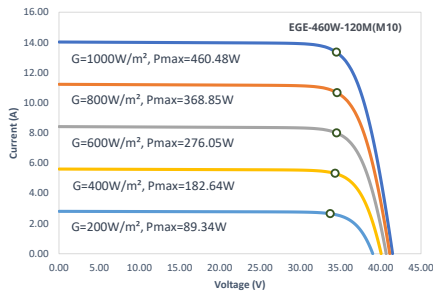
12 Year Product Warranty

30 Year Linear Power Warranty

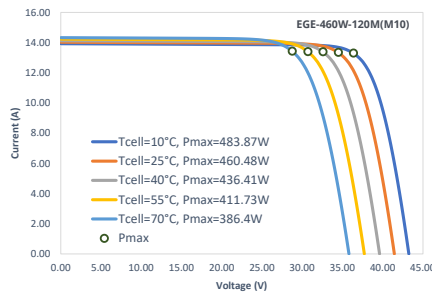


## Characteristics

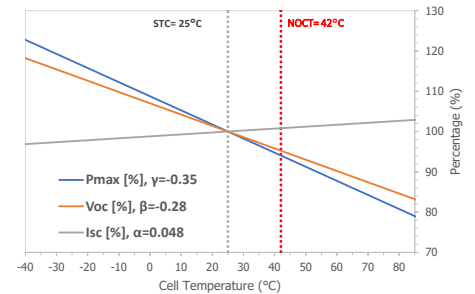
IV-Curves Irradiance



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 BiFi30: 30% irradiance ratio)

Module Type	EGE-440W-120M(GM10)			EGE-445W-120M(GM10)			EGE-450W-120M(GM10)			EGE-455W-120M(GM10)			EGE-460W-120M(GM10)		
	STC	NOCT	BiFi30	STC	NOCT	BiFi30	STC	NOCT	BiFi30	STC	NOCT	BiFi30	STC	NOCT	BiFi30
Power output (Pmax)	440 W	331.80 W	532.40 W	445 W	335.60 W	538.45 W	450 W	339.40 W	544.50 W	455 W	343.10 W	550.55 W	460 W	346.70 W	556.60 W
Maximum power voltage (Vmp)	34.10 V	31.90 V	34.10 V	34.30 V	32.10 V	34.30 V	34.50 V	32.30 V	34.50 V	34.70 V	32.40 V	34.70 V	34.88 V	32.60 V	34.88 V
Maximum power current (Imp)	12.91 A	10.40 A	15.61 A	12.98 A	10.47 A	15.70 A	13.05 A	10.52 A	15.78 A	13.12 A	10.57 A	15.87 A	13.19 A	10.63 A	15.96 A
Open circuit voltage (Voc)	41.00 V	38.60 V	41.00 V	41.20 V	38.80 V	41.20 V	41.40 V	39.00 V	41.40 V	41.60 V	39.10 V	41.60 V	41.80 V	39.30 V	41.80 V
Short circuit current (Isc)	13.67 A	11.02 A	16.53 A	13.75 A	11.09 A	16.63 A	13.81 A	11.14 A	16.70 A	13.87 A	11.19 A	16.77 A	13.94 A	11.24 A	16.86 A
Bifaciality Factor	80% ± 10%														
Power tolerance	0~+5 W														
Module efficiency	20.31%			20.55%			20.78%			21.01%			21.24%		

## Mechanical Characteristics

Cell type	Monocrystalline (182x91 mm)
Number of cells	120 (6x20)
Dimensions	1910x1134x30mm
Weight	27.5 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: 1930\*1125\*1259mm)

Type	Quantity	Weight
Per Pallet	36 pcs	1024 kg
40ft HQ Container	864 pcs	24.58 t

## Engineering Drawings

