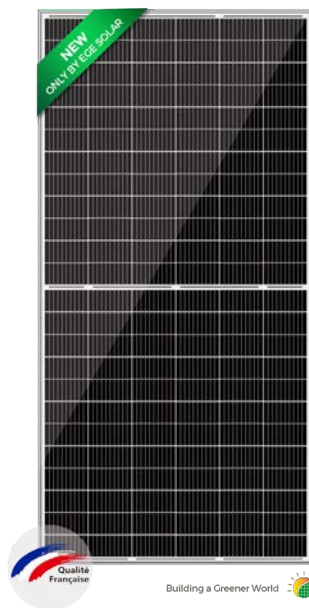


# HELIOS PLUS

445-455 W / 144 Cells / 9 Bus Bars  
Monocrystalline Module  
EGE-445-455W-144M (M6)

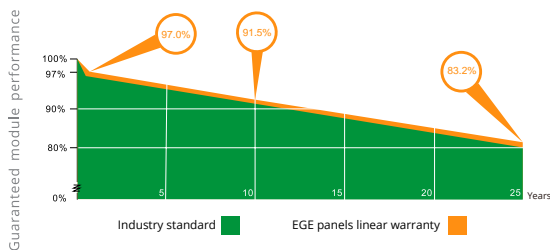


## CERTIFICATES

TUV SUD (IEC61215/61730), ISO 9001:2015,  
PV Cycle, CE, UL, PID Free

## LINEAR PERFORMANCE WARRANTY

12-Year Product Warranty · 25-Year Linear Power Warranty



Eco Green Energy's modules are only made of grade A solar cells with a very high efficiency and ensured more than 25 years lifespan.

## KEY FEATURES



Reduce the temperature of the solar hot spot above 20 °C and current intensity between each cells, increase of the efficiency and power



Lower temperature coefficient



Lower LCOE (Levelized Cost of Energy), larger size of light receiving area and power



Reduction of the risk of Micro-cracks



Reducing the loss of current mismatch and resistance between each cells



**25 YEARS** OUTPUT POWER WARRANTY



**12 YEARS** PRODUCT WARRANTY

## ELECTRICAL DATA AT STC\*

Power output (Pmax)	445 W	450 W	455 W
Power tolerance	0~+5 W	0~+5 W	0~+5 W
Module efficiency	20.4 %	20.6 %	20.8 %
Maximum power voltage (Vmp)	41.20 V	41.40 V	41.60 V
Maximum power current (Imp)	10.81 A	10.87 A	10.94 A
Open circuit voltage (Voc)	49.80 V	50.00 V	50.20 V
Short circuit current (Isc)	11.37 A	11.44 A	11.51 A

\*Standard Test Conditions: Irradiance: 1 000 W / m<sup>2</sup> • Cell temperature: 25°C • AM: 1.5

## ELECTRICAL DATA AT NMOT\*

Power output (Pmax)	331.74 W	335.40 W	339.08 W
Maximum power voltage (Vmp)	38.80 V	39.00 V	39.20 V
Maximum power current (Imp)	8.55 A	8.60 A	8.65 A
Open circuit voltage (Voc)	46.80 V	47.00 V	47.20 V
Short circuit current (Isc)	9.16 A	9.21 A	9.26 A

\*Nominal Operating Cell Temperature: Irradiance: 800 W / m<sup>2</sup> • Ambient temperature: 20°C • AM: 1.5 • Wind speed: 1 m/s

## TEMPERATURE CHARACTERISTICS

NMOT	41 °C ±3 °C
Temperature coefficient of Pmax	-0.35%/°C
Temperature coefficient of Voc	-0.30%/°C
Temperature coefficient of Isc	+0.05%/°C

## MAXIMUM RATINGS

Operating temperature range	-40 °C ~+85 °C
Maximum system voltage	1000V/DC(IEC)/1500V/DC(IEC)
Max series fuse rating	25 A
Max front load (e.g.: snow)	5400 Pa
Max back load (e.g.: wind)	2400 Pa

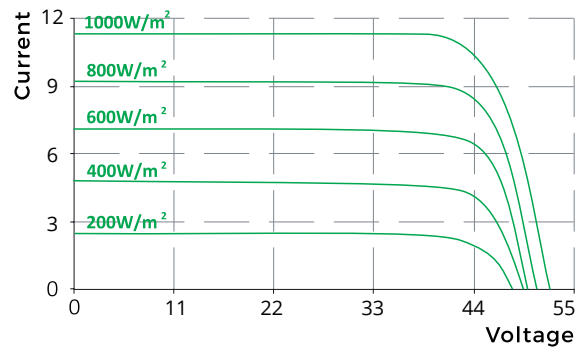
## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline (166x83 mm)
Number of cells	144
Dimensions	2102x1040x35mm
Weight	24.5 kg
Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction box	IP68
Cable	4.0 mm <sup>2</sup> , 300/1300mm
Connector	MC4 EVO2 compatible

## PACKAGING

Type	Pcs/ Type	Weight
Per Pallet	30 pcs	780 kg
20ft GP Container	296 pcs	7.70 t
40ft GP Container	624 pcs	16.22 t
40ft HQ Container	686 pcs	17.84 t

## I-V CURVES



## ENGINEERING DRAWINGS (mm)

