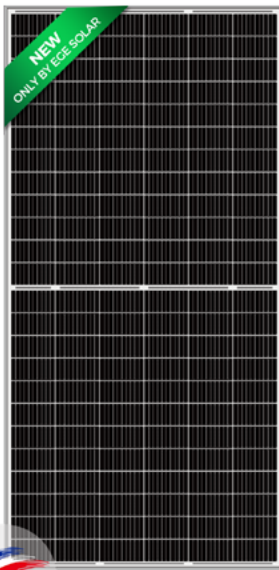


# HELIOS

405-415 W / 144 Cells / 9 Bus Bars  
Monocrystalline Module  
EGE 158-M-72-HC



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



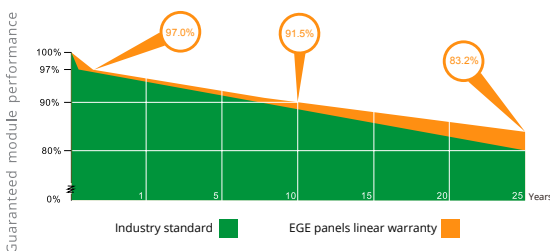
Reducing the loss of current mismatch and resistance between each cells

## CERTIFICATES

ISO 9001:2015 / PV CYCLE / CE

## LINEAR PERFORMANCE WARRANTY

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



**25 YEARS** OUTPUT POWER WARRANTY



**12 YEARS** PRODUCT WARRANTY

## ELECTRICAL DATA AT STC\*

Power output (Pmax)	405 W	410 W	415 W
Power tolerance	0~+5 W	0~+5 W	0~+5 W
Module efficiency	20,13 %	20,38 %	20,63 %
Maximum power voltage (Vmp)	40,8 V	41,0 V	41,2 V
Maximum power current (Imp)	9,93 A	10,00 A	10,08 A
Open circuit voltage (Voc)	49,2 V	49,4 V	49,6 V
Short circuit current (Isc)	10,35 A	10,40 A	10,43 A

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

## ELECTRICAL DATA AT NOCT\*

Power output (Pmax)	305 W	309 W	313 W
Maximum power voltage (Vmp)	39,8 V	40,1 V	40,3 V
Maximum power current (Imp)	7,67 A	7,71 A	7,77 A
Open circuit voltage (Voc)	47,5 V	47,7 V	47,9 V
Short circuit current (Isc)	8,23 A	8,27 A	8,31 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

NOCT	45 °C ( ±2 °C)
Temperature coefficient of Pmax	-0,37%/°C
Temperature coefficient of Voc	-0,29%/°C
Temperature coefficient of Isc	+0,05%/°C

## MAXIMUM RATINGS

Operating temperature range	-40 °C ~+85 °C
Maximum system voltage	1000V / 1500V DC
Max series fuse rating	20 A
Max front load (e.g.: snow)	5400 Pa
Max back load (e.g.: wind)	3800 Pa

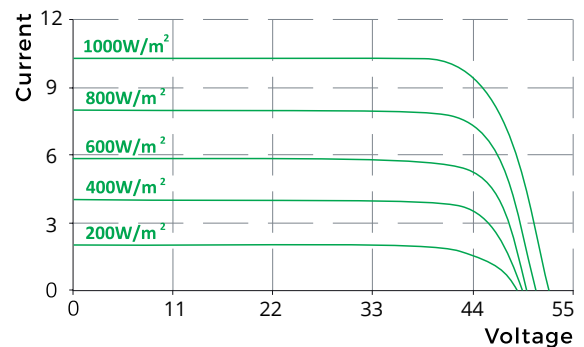
## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline (158.75x79.38 mm)
Number of cells	144
Dimensions	2008x1002x35mm
Weight	23 kg
Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction box	IP68
Cable	4,0mm <sup>2</sup>
Connector	QC4 or MC4 compatible

## PACKAGING

Type	Pcs/ Type	Weight
Per Pallet	30 pcs	740 kg
20ft GP Container	320 pcs	7,9 t
40ft GP Container	670 pcs	16,5 t
40ft HQ Container	740 pcs	18,2 t

## I-V CURVES



## ENGINEERING DRAWINGS (mm)

