



# 20M-GH

## HELIENE

20 CELL MONOCRYSTALLINE GREEN HOUSE MODULE

### 100 Wp

MAX POWER OUTPUT

### 5%

MAX EFFICIENCY

### 10 YEAR

PRODUCT WARRANTY

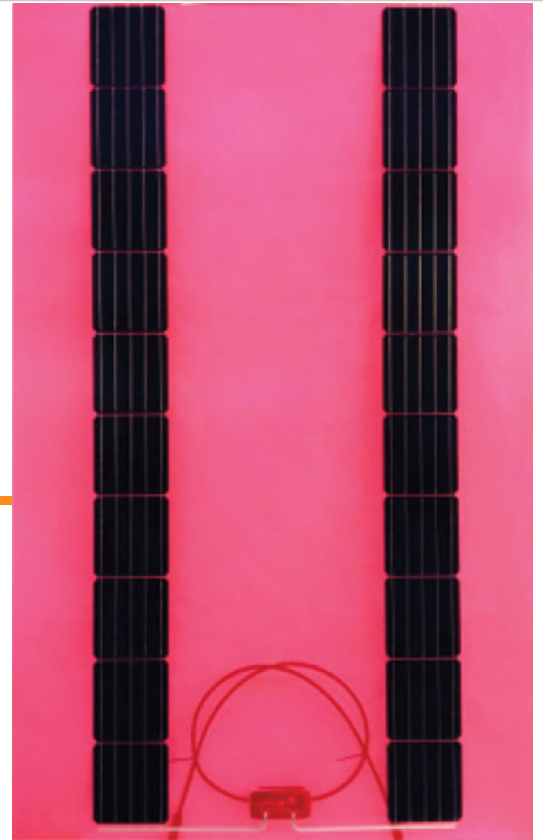
### 25 YEAR

LINEAR PERFORMANCE GUARANTEE

HELIENE IS A PREMIER SOLAR MODULE MANUFACTURER, SERVICING THE GROWING SOLAR ENERGY MARKETS OF NORTH AMERICA.

COMBINING PROVEN EUROPEAN TECHNOLOGY WITH NORTH AMERICAN INGENUITY ALLOWS HELIENE TO MAKE A REAL COMMITMENT IN PROVIDING SMARTER ENERGY CHOICES FOR THE FUTURE.

**HELIENE**  
[www.heliene.com](http://www.heliene.com)



GUARANTEED POSITIVE POWER SORTING: [-0 : +4.99 WP]



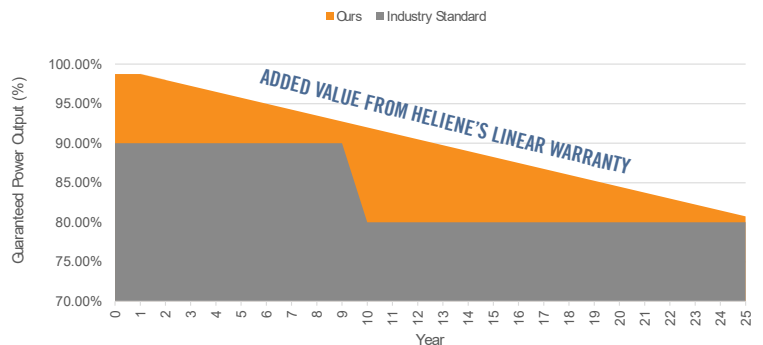
AVAILABLE IN 1000V SYSTEM VOLTAGE RATING



MANUFACTURED FOLLOWING INTERNATIONAL QUALITY SYSTEM STANDARDS: ISO9001

## LINEAR PERFORMANCE GUARANTEE

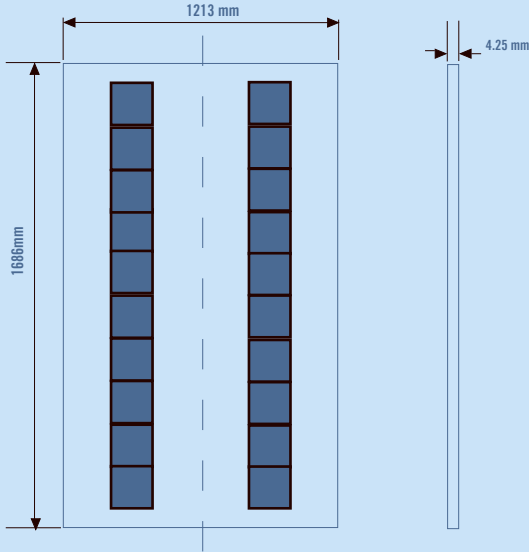
10 YEAR WORKMANSHIP WARRANTY • 25 YEAR LINEAR PERFORMANCE GUARANTEE



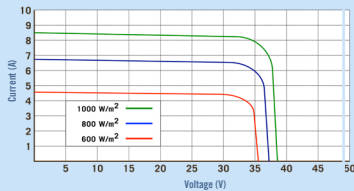
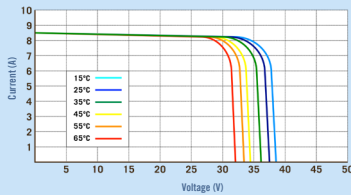
# 20M-GH

## 20 CELL MONOCRYSTALLINE GREEN HOUSE MODULE

### DIMENSIONS FOR 60M HOME PV SERIES



### I-V CURVE FOR HELIENE 60M HOEM PV SERIES



### CERTIFICATIONS



### ELECTRICAL DATA (STC)

Peak Rated Power	$P_{mpp}$ (W)	100
Maximum Power Voltage	$V_{mpp}$ (V)	10.59
Maximum Power Current	$I_{mpp}$ (A)	9.54
Open Circuit Voltage	$V_{oc}$ (V)	13.30
Short Circuit Current	I <sub>sc</sub> (A)	9.96
Module Efficiency *	Eff (%)	4.90
Maximum Series Fuse Rating	MF (A)	20
Power Output Tolerance		[- 0 , + 4.99] Wp

STC - Standard Test Conditions: Irradiation 1000 W/m<sup>2</sup> - Air mass AM 1.5 - Cell temperature 25 °C  
 \* Calculated using maximum power based on full positive output tolerance [-0 , +4.99] Wp

### MECHANICAL DATA

Dimensions (L x W x D)	1686 x 1213 x 4.25 mm (66.3 x 47.8 x 0.17 inch) (Can be customized)
Weight*	8.6 kg (19 lbs)
Output Cables	0.75 m (29.5 inch) symmetrical cables with MC4 type connectors
Junction Box	potted with bypass diodes
Frame	No frame
Front Glass	Low-iron content, high-transmission PV solar glass
Solar Cells	20 Monocrystalline cells (156.75 x 156.75 mm)

\* Calculated using 3.2mm PV glass, if 4mm profile is requested weight load will vary

### CERTIFICATIONS

UL Certification	ULC/ORD-C1703-1, UL1703
IEC Certification	Optional

All Heliene modules are certified under the California Energy Commission (CEC) Listing Report

### TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	+45°C (±2°C)
Temperature Coefficient of $P_{max}$	-0.37%/°C
Temperature Coefficient of $V_{oc}$	-0.28%/°C
Temperature Coefficient of $I_{sc}$	0.041%/°C

### PACKAGING CONFIGURATION

Modules per box:	28 pieces
Modules per 53' trailer:	420 pieces

### MAXIMUM RATINGS

Operational Temperature	-40°C - +85°C
Max System Voltage	1000V

### WARRANTY

10 Year Manufacturer's Workmanship Warranty

25 Year Linear Power Guarantee

(Refer to product warranty page for details)