

HELIENE 20^M-GH

20CELL MONOCRYSTALLINE GREENHOUSE MODULE

100 Wp

MAX POWER OUTPUT

5%

MAX EFFICIENCY

15 YEAR

PRODUCT WARRANTY

25 YEAR

LINEAR PERFORMANCE GUARANTEE



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



AVAILABLE IN 1000V SYSTEM VOLTAGE RATING



MANUFACTURED FOLLOWING INTERNATIONAL QUALITY SYSTEM STANDARDS: ISO9001

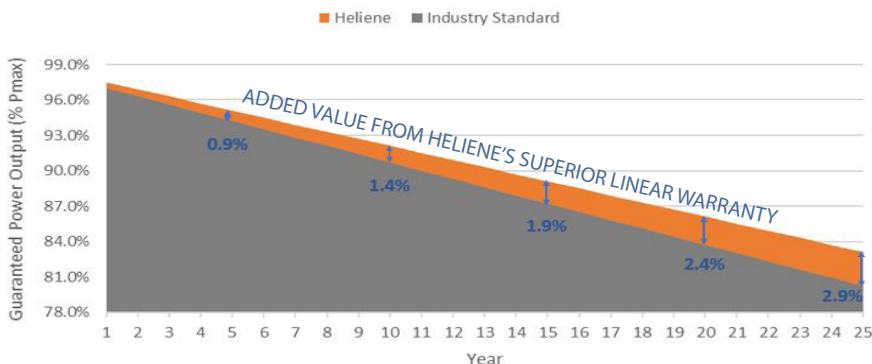
HELIENE IS A PREMIER SOLAR MODULE MANUFACTURER, SERVICING THE GROWING SOLAR ENERGY MARKETS OF NORTH AMERICA.

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

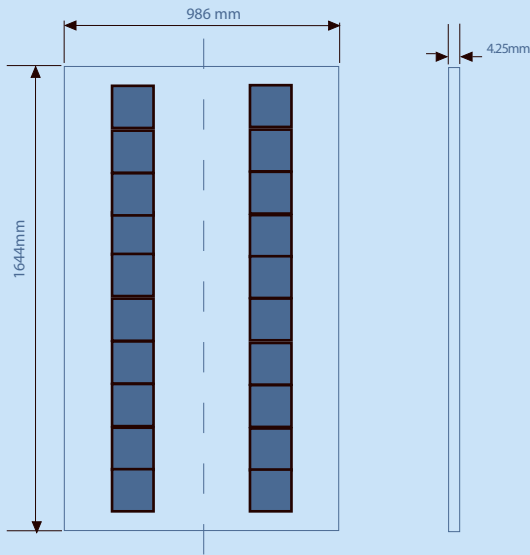
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LINEAR PERFORMANCE GUARANTEE

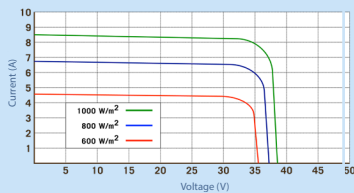
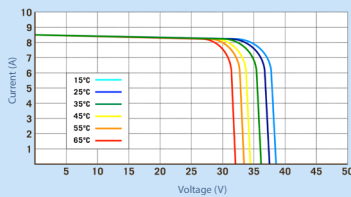
15 YEAR WORKMANSHIP WARRANTY • 25 YEAR LINEAR PERFORMANCE GUARANTEE



DIMENSIONS FOR 20M GH PV SERIES



I-V CURVE FOR HELIENE 20M GH 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 _{sc} (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/m² - 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)	1644 x 986 x 4.25 mm (64.72 x 38.82 x 0.17 inch) (Can be customized)
Weight*	8 kg (17.6 lbs)
Output Cables	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

* 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:	20 pieces
Modules per 53' trailer:	360 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)