



HELIENE

PHOTOVOLTAIC
MODULES

60^P - SERIES

60-Cell Polycrystalline



250Wp

MAX POWER OUTPUT

15.6%

MAX EFFICIENCY

10 YEAR

PRODUCT WARRANTY

25 YEAR

LINEAR PERFORMANCE GUARANTEE

HELIENE INC. IS CANADA'S PREMIER MODULE MANUFACTURER, SERVICING THE GROWING SOLAR ENERGY MARKETS OF NORTH AMERICA.

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



Canadian

Owned & Operated



CERTIFIED TO WITHSTAND HIGH **WIND LOADS (2400PA)** AND **SNOW LOADS (5400PA)**



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



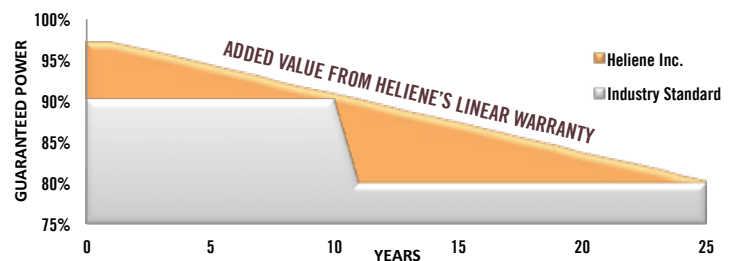
MANUFACTURED ACCORDING TO INTERNATIONAL QUALITY SYSTEM STANDARDS: **ISO9001**



EXCELLENT PERFORMANCE UNDER LOW LIGHT CONDITIONS SUCH AS CLOUDY DAYS, MORNING AND EARLY EVENING

LINEAR PERFORMANCE GUARANTEE

10 YEAR WORKMANSHIP WARRANTY • 25 YEAR LINEAR PERFORMANCE GUARANTEE



HELIENE

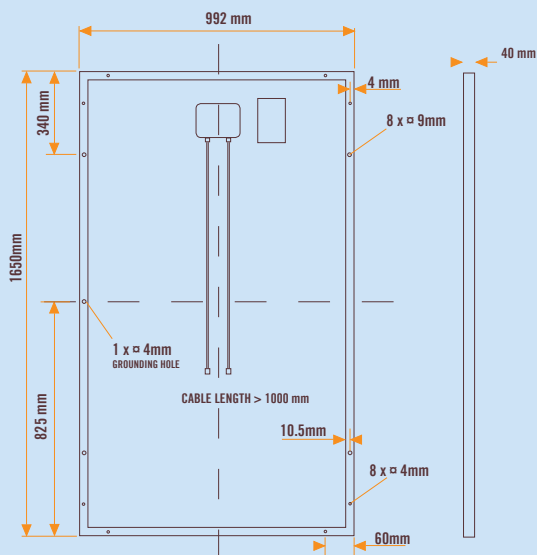
PHOTOVOLTAIC
MODULES

Heliene Inc.

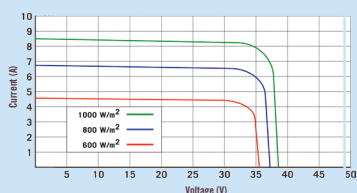
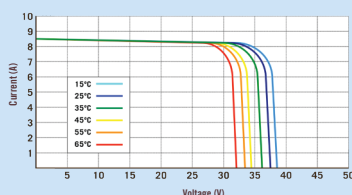
www.heliene.ca

60P - SERIES

DIMENSIONS FOR HELIENE 60P SERIES MODULES



I-V CURVE FOR HELIENE 60P SERIES



CERTIFICATIONS



ELECTRICAL DATA (STC)

Peak Rated Power	P_{mpp} (W)	250	245	240	235
Maximum Power Voltage	V_{mpp} (V)	30.70	30.43	30.35	29.9
Maximum Power Current	I_{mpp} (A)	8.14	8.05	7.91	7.86
Open Circuit Voltage	V_{oc} (V)	37.8	37.65	37.55	37.0
Short Circuit Current	I_{sc} (A)	8.65	8.6	8.55	8.48
Module Efficiency *	Eff (%)	15.6	15.3	15.0	14.7
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)	1650 x 992 x 40 mm (65 x 39 x 1.6 inch)
Weight	19 kg (42 lbs)
Output Cables	> 1.0 m (39) symmetrical cables with MC4 type connectors
Junction Box	IP-65 rated with bypass diodes
Frame	Double webbed 5 micron anodized aluminum alloy
Front Glass	Low-iron content, high-transmission PV solar glass
Solar Cells	60 Polycrystalline cells (156 x 156 mm)

CERTIFICATIONS

UL Listed	ULC/ORD-C1703-1 , UL1703
IEC Listed	IEC 61215, IEC 61730

TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	+45°C (±2°C)
Temperature Coefficient of P_{max}	-0.43%/°C
Temperature Coefficient of V_{oc}	-0.32%/°C
Temperature Coefficient of I_{sc}	0.05%/°C

MAXIMUM RATINGS

Operational Temperature	-40°C - +85°C
Max System Voltage	1000V(IEC) / 600V(UL)
Max Series Fuse Rating	15 A

WARRANTY

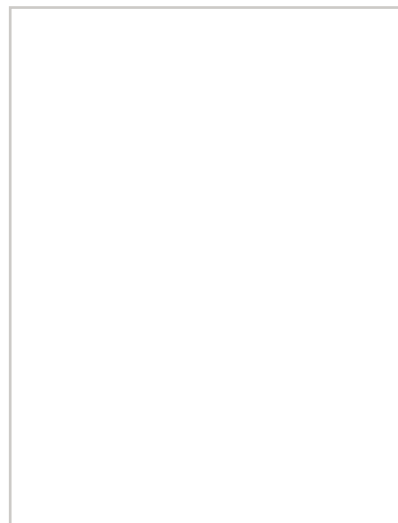
10 Year Manufacturer's Workmanship Warranty

25 Year Linear Power Guarantee

(Refer to product warranty page for details)

PACKAGING CONFIGURATION

Modules per box:	25 pieces
Modules per 53' trailer:	750 pieces



60P_EN_NOV_2012