

HELIENE 60^M

ÉNERGIE
MATRIX
ENERGY

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(260Wp / 255Wp / 250Wp / 245Wp)

60-Cell Mono-Crystalline Solar Module

HELIENE

PHOTOVOLTAIC
MODULES

MADE IN
ONTARIO



- Positive Output Tolerance -0 : +4.99 W
- Textured PV Glass
 - Enhanced Snow-Shedding Ability
 - Increased Light Diffusion
- 10 Year Manufacturer Warranty
- 25 Year Power Guarantee

ARCHITECTURAL INTEGRATION DESIGNS AVAILABLE:



- White Backsheet
- Black Frame

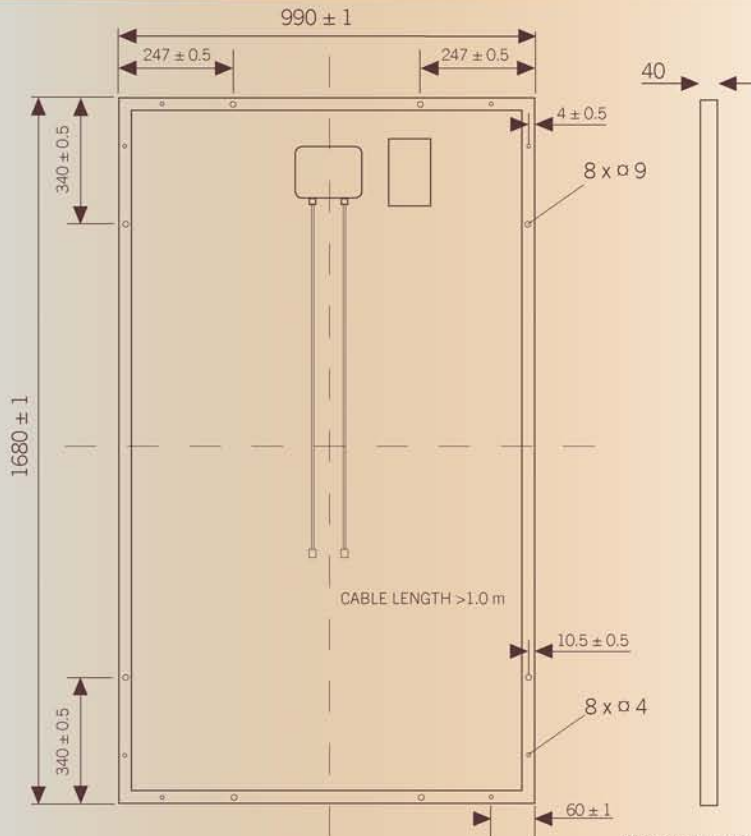


- Black Backsheet
- Black Frame



The HELIENE 60^M solar modules are made using only the highest efficiency mono-crystalline solar cells, designed and manufactured by industry leading suppliers. The textured PV glass, and 3 bus bar design provide an aesthetic look combined with world class power output. High transmission textured glass is used to take advantage of increased light diffusion and snow-shedding abilities. Finally, a reinforced double webbed anodized aluminum frame creates a rigid body to support the module in any application, residential/commercial rooftop to utility scale groundmount and tracking systems.

HELIENE 60^M



*All dimensions in mm, unless otherwise specified
**CAD Drawings available online (www.heliene.ca/products)

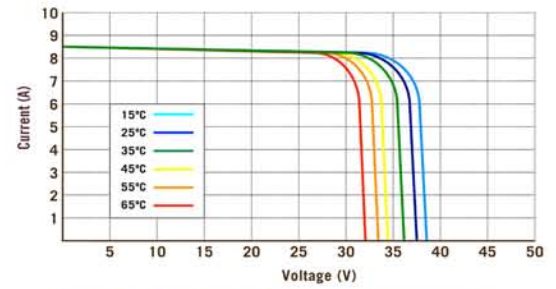


Figure 1: Module IV curve with variation in cell temperature

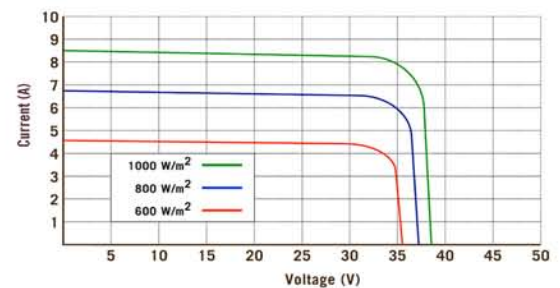


Figure 2: Module IV curve with variation in solar irradiance

Mechanical Data

Dimensions (L x W x D)	1680 x 990 x 40 mm
Weight	24 kg
Output Cables	>1.0m (symmetrical), MC4 type connectors
Junction Box	IP-65 rated with bypass diodes
Frame	Double webbed 5 micron anodized aluminum
Front Glass	Textured high-transmission PV solar glass
Solar Cells	60 Mono-crystalline cells (156 x 156 mm)

Certifications

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

Operating Conditions

Temperature	- 40 C to + 85 C
Max Load	5400 Pa
Static Load	2400 Pa
Impact Resistance	Hailstone Impact (25mm @ 23m/s)

Power Guarantee

Years 1 - 10	> 90%
Years 10 - 25	> 80%

Electrical Data (STC)

Max Rated Power	P_{mpp} (W)	260	255	250	245
Voltage @ Max Power	V_{mpp} (V)	30.84	30.65	30.30	30.03
Current @ Max Power	I_{mpp} (A)	8.43	8.32	8.22	8.18
Open Circuit Voltage	V_{oc} (V)	37.73	37.5	37.40	37.26
Short Circuit Current	I_{sc} (A)	8.9	8.86	8.72	8.71
Module Efficiency *	Eff (%)	15.9	15.6	15.3	15.0
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

System Electrical Parameters

System Voltage (UL/IEC)	600 V / 1000 V	
P_{mpp} Temperature Coefficient	(%/C)	-0.44
V_{oc} Temperature Coefficient	(%/C)	-0.34
I_{sc} Temperature Coefficient	(%/C)	+0.07
Serial Fuse Rating	15 A	
Bypass Diode Rating	15 A	

Product Warranty

10 year limited warranty on material and workmanship