

108HC M10 SL All Black Module

108 Half-Cut Monocrystalline 380W - 400W

20.5%

Utilizes the latest M10 size super high efficiency Monocrystalline PERC cells. Half cut design further reduces cell to module (CTM) losses.

Stability & Looks

Enhanced frame design to withstand higher wind, snow, and other mechanical stresses. Framed Glass–Backsheet aesthetic is ideal for high visibility installation.

Anti-Reflective

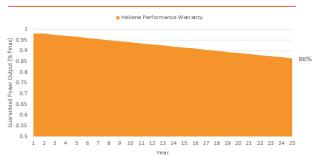
Premium solar glass with anti reflective coating delivers more energy throughout the day.

High Reliability

Proven resistance to PID and reliable in high temperature and humidity environments.

No Compromise Guarantee

25 Year Product Warranty 25 Year Linear Performance Guarantee







Manufactured Using International Quality System Standards: ISO9001

Half-Cut Design with Split Junction Box Technology

2% First year degradation & 0.5% Annual Power degradation

World-class Quality

- Heliene's fully automated manufacturing facilities with state-of-the-art robotics and computer aided inspection systems ensure the highest level of product quality and consistency
- All manufacturing locations are compliant with international quality standards and are ISO 9001 certified
- Heliene modules have received Top Performer rankings in several categories from PV Evolution Labs (PV EL) independent quality evaluations

Bankable Reputation

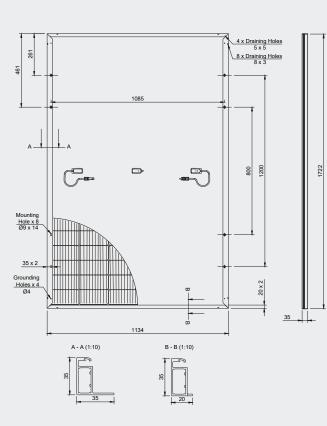
- Established in 2010, Heliene is recognized as highly bankable Tier 1 manufacturer of solar modules and has been approved for use by the U.S. Department of Defense, U.S. Army Corps of Engineers and from numerous top tier utility scale project debt providers
- By investing heavily in research and development, Heliene has been able to stay on the cutting edge of advances in module technology and manufacturing efficiency

Local Sales, Service, and Support

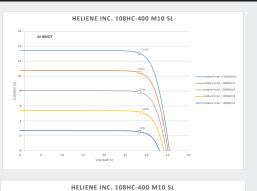
- With sales offices across the U.S. and Canada, Heliene prides itself on unsurpassed customer support for our clients. Heliene has become the brand of choice for many of the leading residential installers, developers and Independent Power Producers due to our innovative technology, product customization capability and just in time last-mile logistics support
- Local sales and customer support means answered phone calls and immediate answers to your technical and logistics questions. We understand your project schedules often change with little warning and endeavor to work with you to solve your project management challenges

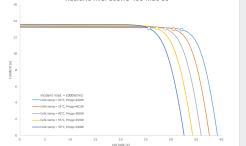


Dimensions for 108HC M10 SL All Black Series Modules



I-V Curves for108HC M10 SL All Black Series Modules







Electrical Data (STC)

Peak Rated Power*	P _{mpp} (W)	400	395	390	385	380
Maximum Power Voltage	V _{mpp} (V)	31.81	31.49	31.27	30.85	30.63
Maximum Power Current	I _{mpp} (A)	12.58	12.56	12.54	12.48	12.44
Open Circuit Voltage*	$V_{oc}(V)$	37.56	37.38	37.22	36.95	36.82
Short Circuit Current**	I _{sc} (A)	13.30	13.28	13.26	13.24	13.22
Module Efficiency	Eff (%)	20.5	20.2	20.0	19.7	19.5
Maximum Series Fuse Rating	MF (A)	30	30	30	30	30
Power Sorting Range	[- 0/+3%]					

STC - Standard Test Conditions: Irradiation 1000 W/m² - Air mass AM 1.5 - Cell temperature 25 °C, *P_{mpp} Production Tolerance \pm 3%, *V_{oc} Production Tolerance \pm 3%, *H_{sc} Production Tolerance \pm 4%

Electrical Data (NMOT)

Maximum Power	P _{mpp} (W)	298	295	291	287	283
Maximum Power Voltage	V_{mpp} (V)	30.22	29.92	29.71	29.38	29.10
Maximum Power Current	I _{mpp} (A)	9.87	9.84	9.79	9.77	9.74
Open Circuit Voltage	$V_{oc}(V)$	35.68	35.51	35.36	35.10	34.98
Short Circuit Current	I _{sc} (A)	10.75	10.73	10.71	10.70	10.68

NMOT - Nominal Module Operating Temperature:

Irradiance at 800W/m², Ambient Temperature 20°C, Wind speed 1m/s

Mechanical Data

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Solar Cells HELIENE	108 Half-Cut, M10, 182mm, PERC Cells
Module Construction	Framed Glass-Backsheet
Dimensions (L x W x D)	1722 x 1134 x 35 mm (67.79 x 44.65 x 1.38 inch)
Weight	21.5 kg (47.4 lbs)
Frame	Double Webbed 15-Micron Anodized Aluminum Alloy
Glass	3.2mm Low-Iron Content, High-Transmission, PV Solar Glass with Anti Reflective Coating
Junction Box	IP-68 rated with 3 bypass diodes
Output Cables	4mm ² (12AWG),1.2-meter Symmetrical Cables (Standard) 0.3-meter Symmetrical Cables (Optional)

Connectors Multi-Contact/ Stäubli MC4

Certifications

UL Certification	UL6121			
Temperature Ratings			Maximur	
Nominal Module Operating Temperature (NMOT)		+45°C(±2°C)	Operational Temp	
		10 0(12 0)	Max System Volta	
Temperature Coefficient	of P_{\max}	-0.34%/°C	Mech. Load Test (
Temperature Coefficient	t of V _{oc}	-0.25%/°C	Mech. Load Test (
Temperature Coefficient	t of I	0.05%/°C		
	30		Fire Rating	

Warranty

- 25 Year Product Warranty
- 25 Year Linear Power Guarantee

Maximum Ratings

Packaging Configuration			
Fire Rating Type 1			
Mech. Load Test (Back)	50 psf / 2400 Pa		
Mech. Load Test (Front)	113psf/ 5400Pa		
Max System Voltage	1500V		
Operational Temperature	-40°C to +85°C		

Modules per Pallet 40' Container:	31 pieces		
Modules per 40' Container:	806 pieces		
Modules per Pallet 53' Trailer:	28 pieces		
Modules per 53' Trailer:	672 pieces		

The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the ongoing innovation and product enhancements. Heliene Inc. reserves the right to make necessary adjustment to the information described herein at any time without prior notice. PV modules should be handled and installed only by qualified people. Please carefully read safety and installation instructions available for download from Heliene website before using Heliene PV modules. For warranty details, please refer to Product Warranty Document, also available for download from Heliene website.

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