



Evolution ULTRA POWER EDITION

PLM-370H6MB-120

Monocrystalline Solar Module

WITH HIGH EFFICIENCY PERC TECHNOLOGY



Performance

Good performance even under low light conditions



Ultrablack

Great aesthetic look



Reliability

Strict selection of raw materials and strict quality control ensure reliability



Ultra reflective backing sheet

Increases performance, maximises solar irradiance capture



Smart-ready

Optional smart-ready design. Easy upgrade into smart solar module solution



Module Efficiency

20% Module Efficiency



Limited Peak Power Warranty -

12 years @92%
25 years @85%
30 years @80%



Water Drainage Corners

Avoids dirt buildup, unique design structure, best ever product quality



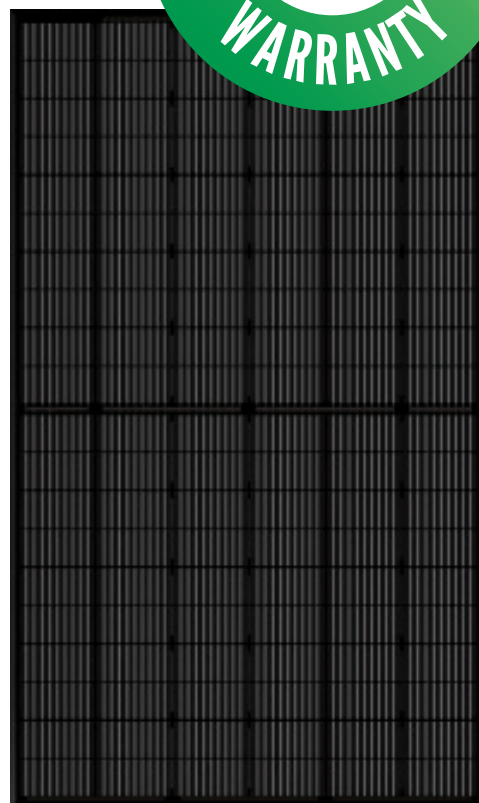
9 Busbars

Improved performance, decreases natural loss



Lifetime

Performance & product warranty



- ✓ Minimised Surface Recombination speed – to improve cell voltage and current
- ✓ Increased internal reflectivity – to improve cell current
- ✓ Up to 10% more power per m2 compared to standard modules
- ✓ Excellent low light performance – to ensure optimum generation year round
- ✓ Maintains temperatures to ensure energy generation is more efficient



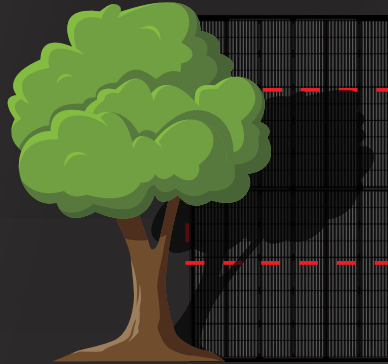
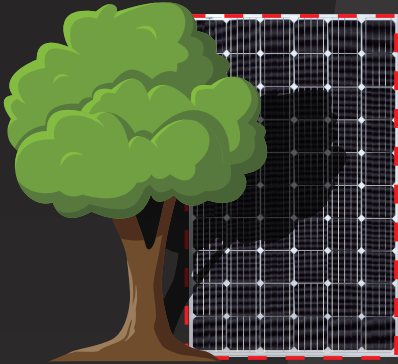
Higher Yield Due to Better Shading Response

Evolution Half-Cell Black Series comprises two separated and identical solar cell arrays, which means the ordinary strings of cells are cut into halves, and these shorter strings compose arrays which has separated current paths. When a module is shaded, only one side shaded array's current will be impacted, while the other array will still be functionally producing power. Under this circumstance, when a module is shaded, the affected working areas of Evolution Half-Cell Black Series will be 50% less.

By cutting solar cell into halves, the internal power loss will be lower and hot spot effect will also be reduced.

Standard Module

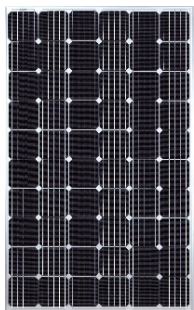
Evolution Half-Cell Black Series



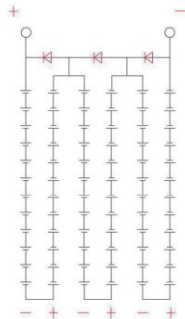
Less Mismatch loss

Instead of 6 internal strings of cells, the Evolution Half-Cell Black Series module has 2 ×6 shorter ones. This design effectively deals with the mismatch happened between cells caused by shadow, out of sync performance degradation, etc.

Standard Module / With 6 internal strings of cells



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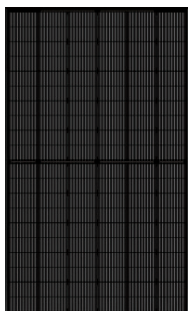
Design Sketch

Circuit Diagram

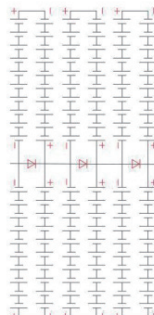
Electrical Mismatch

Module current output is 8.7A, current mismatch in series is **0.3A**

Evolution Half-Cell Black Series With 2×6 internal strings of cells



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Design Sketch

Circuit Diagram

Electrical Mismatch

Module current output is 4.5+4.35=8.75A, current mismatch in series is **0.15A**



Evolution ULTRA POWER EDITION

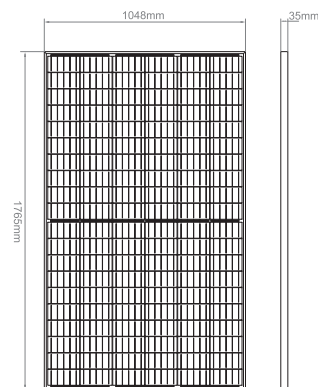
PLM-370H6MB-120

Monocrystalline Solar Module
WITH HIGH EFFICIENCY PERC TECHNOLOGY

Electrical Characteristics (STC*)

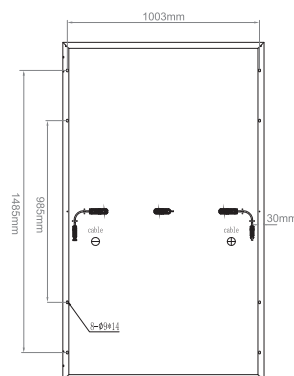
Maximum Power at STC (Pmp)	370
Maximum Power Voltage (Vmp)	34.01
Maximum Power Current (Imp)	10.88
Open Circuit Voltage (Voc)	40.81
Short Circuit Current (Isc)	11.33
Module Efficiency at STC (nm)	20.00%

STC: 1000W/m² irradiance, 25°C cell temperature, AM 1.5g spectrum.
Power tolerance: ±3%



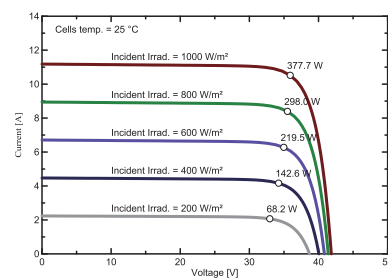
Mechanical Specifications

Solar Cells	PERC Mono crystalline 166×83mm
External Dimensions	1765×1048×35mm(L×W×H)
Front Glass	3.2mm AR coating tempered glass, low iron
Weight	21.2Kg
Output Cable	4.0 mm ² , cable length 300mm
Connector	Mc4 Compatible
Junction Box	IP 68, 3 diodes
Frame	Anodized aluminium alloy



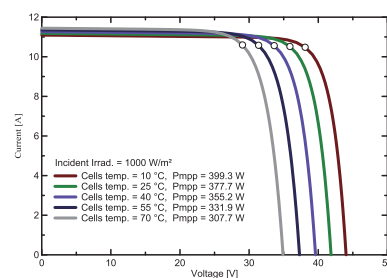
Temperature Characteristics

Isc Temperature Coefficient	+0.048%/°C
Voc Temperature Coefficient	-0.31%/°C
Pmax Temperature Coefficient	-0.38%/°C
Nominal Operating Cell Temperature (NOCT)	43 ± 2°C



Operating Characteristics

Max. system voltage	DC1500V
Limiting reverse current	15A
Operating temperature range	-40°C~85°C
Max. static load front (e.g., snow)	5400Pa
Max. static load back (e.g., wind)	2400Pa
Max. hailstone impact (diameter / velocity)	25mm / 23m/s



Package

Container	20'GP	40'HQ
Pieces Per Big Pallet	54	64
Big Pallets Per Container	6	12
Pieces Per Container	324	768

Perlight Partners

Project
Better Energy