

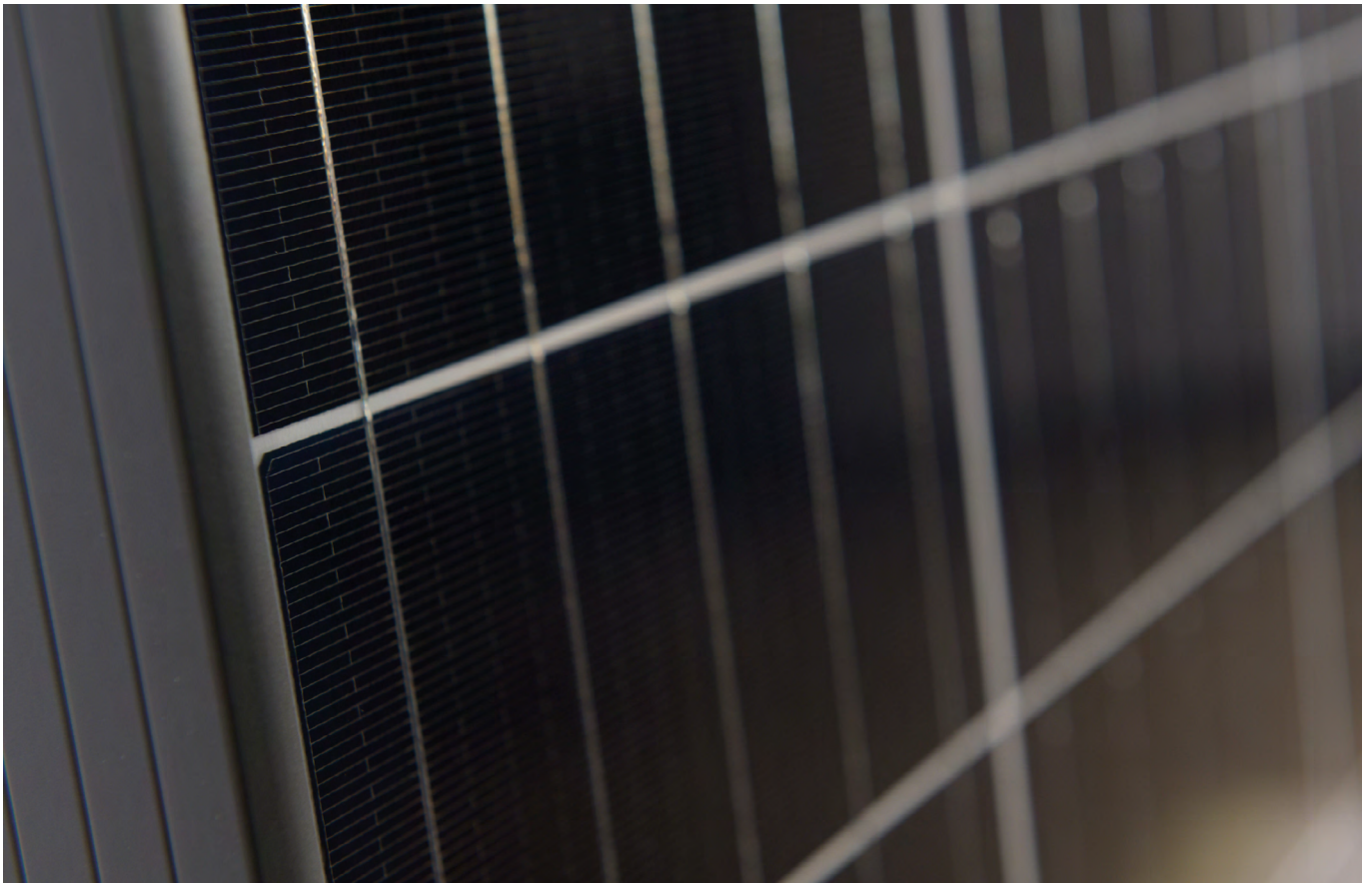
The **half-cut** technology

Half-Cut modules have twice the number of cells compared to traditional modules, so the panels will have 108 and 132 half cells.

The Half-Cut technology allows to increase the average power of the module while maintaining the same dimensions. The current flowing through each cell is smaller, being cut in half. As a result, it reduces power loss and increases performance.

The advantages:

- The cells, being smaller, suffer reduced mechanical stress. Consequently, there is less chance of them breaking;
- Thanks to the high power of the modules with half-cut cells, the license plate power of the plant is greater for the same area occupied;
- The upper and lower half of the module are independent and this guarantees a lower loss of energy in case of partial shading. In fact, if the lower half of the module is in shadow, the upper half continues to produce;
- Since the surface area is half that of whole cells, in half-cut cells the current produced is halved. So the module temperature will be lower, thus increasing the producibility.



410Wp Monocrystalline Panels with **half-cut** technology

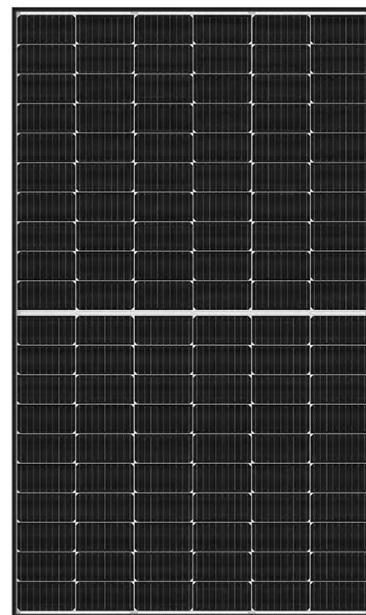
The photovoltaic panels provided by ECA Technology are among the best on the market and provide high efficiency, quality and durability.

Robust, durable design using high-quality materials: Low iron tempered glass with anti-reflection treatment, 3.2 mm thick black frame and hollow chamber frame.

The two independent circuits in the **new HALF-CUT technology** allow for less energy loss in the event of shading and/or dirt accumulation.

The Module

- 108 highest grade monocrystalline half-cut cells with 9 Busbars;
- Power tolerance 0 / +3W;
- Robust PID resistance ensured by optimising the solar cell process and careful selection of modules;
- Higher energy yield at lower operating temperature;
- Reduced risk of hot spots with optimised electrical design and lower operating current;
- Anodised aluminium frame, hollow chamber frame;
- Glass thickness 3.2 mm;
- Product warranty: 12 years;
- Slowest possible power degradation using LOW LID MONO PERC cells;
- Certification IEC 61215 / IEC 61730;
- Reaction to fire class 1.



Pannello monocristallino 410Wp

TECHNICAL DATA

MODEL		410M
Nominal power PMPP	Wp	410
Power Tolerance		0 / +3%
Nominal voltage VMPP	V	31,25
Nominal current IMPP	A	13,12
No-load voltage VOC	V	37,25
Short-circuit current ISC	A	13,88
Module efficiency	%	21,0
NOCT	°C	45 ± 2°C
Maximum system voltage	V	1500 DC
Temperature coefficient ISC	%/°C	+0,050
Temperature coefficient VOC	%/°C	-0,265
Temperature coefficient PMPP	%/°C	-0,340
Dimensions HxWxD	mm	1722x1134x30
Weight	Kg	21,5
Max snow load	Pa/m²	5400

Standard Test Conditions (STC): Radiation intensity 1000 W/m²; spectral distribution AM 1.5; cell temperature 25± 2°C.