

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.



525 and 580 Wp Monocrystalline Panels with **half-cut** technology

LONGI photovoltaic panels, proposed by ECA Technology, are among the best on the market and offer high yields, quality and durability over time.

Solid and resistant design given by the materials it is made of: 3.2 mm thick iron-poor tempered glass with anti-reflective treatment, black frame and hollow chamber frame.

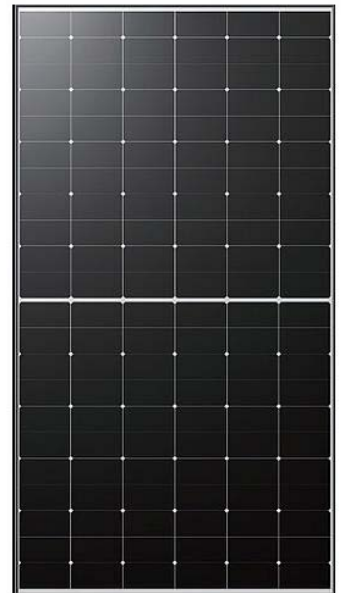
New generation HPBC (hybrid back contact passivation) **technology**, which improves the light absorption and photoelectric conversion capabilities of the cell, increasing the module's performance even in high temperature and low irradiation conditions.

Furthermore, the two independent circuits of HALF-CUT technology allow for less energy loss in the event of shading and/or the presence of dirt.



The Module

- 132 monocrystalline cells (for 525Wp panel) - 144 first-class half-cut monocrystalline cells (for 580Wp panel) with HPBC (Hybrid Passivated Back Contact) technology;
- busbar-free design on the front side, which allows for a side free from shadowed metal contacts;
- single-line rear contact welding to improve the module's resistance to breakage;
- Power tolerance 0 /+3%;
- Solid PID resistance ensured by solar cell process optimization and careful module selection;
- Reduced risk of hot spots with optimized electrical design and lower operating current;
- Anodized aluminum frame, hollow chamber frame;
- Glass thickness 3.2 mm;
- Product warranty: 15 years;
- IEC 61215 / IEC 61730 certifications;
- Fire reaction class 1.



525Wp Monocrystalline Panel

TECHNICAL DATA

MODEL		525M	580M
Nominal power PMPP	Wp	525	580
Power Tolerance		0 / +3%	0 / +3%
Nominal voltage VMPP	V	40,06	44,06
Nominal current IMPP	A	13,11	13,17
No-load voltage VOC	V	47,73	52,21
Short-circuit current ISC	A	14,12	14,20
Module efficiency	%	22,1	22,5
NOCT	°C	45 ± 2°C	45 ± 2°C
Maximum system voltage	V	1500 DC	1500 DC
Temperature coefficient ISC	%/°C	+0,050	+0,050
Temperature coefficient VOC	%/°C	-0,230	-0,230
Temperature coefficient PMPP	%/°C	-0,290	-0,290
Dimensions HxWxD	mm	2094x1134x35	2278x1134x35
Weight	Kg	26	27,5
Max snow load	Pa/m²	5400	5400

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