



Back to black for efficiency and aesthetics

As the market for domestic solar panels grows, so does demand for new innovations that not only increase energy efficiency, but that look the part too. PES spoke to Francis Rome, Chairman of the Board at Belinus, to find out how it is helping to meet this demand.



PES: Welcome to PES Francis. Perhaps we could begin with a short introduction to Belinus and some background to the company?

Francis Rome: Belinus began in 2015, as a service company for the technical and quality checks of solar panels to support Belgian and Dutch clients. Nowadays, Belinus is the only Belgian manufacturer of IBC glass-glass ultra black solar panels and energy storage batteries for home use.

We are very proud that our head office is located in Thor Park in Genk and since it began the company has established an excellent reputation in more than 10 European countries.

PES: You are headquartered in Belgium, is

this your market focus too, or do you have an international outlook in Europe and globally?

FR: Year by year we are expanding our distributorship network in other European countries and pushing our brand in markets such as Germany, Benelux countries, etc. We have found our niche in the market and our product portfolio, manufacturing facilities and capacities are giving us possibilities to develop markets overseas too. The US and Australia are our targets for the upcoming years.

PES: Your key product is the glass-glass solar panels, can you tell me a bit about them?

FR: We are the only Belgium supplier offering IBC glass-glass ultra black solar panels. The M8 ultra-black night IBC 390| 400 panels

comprise the state-of-the-art N-type IBC cells, with efficiencies of 25.5%. The open circuit voltage is 41,9V and the short circuit current is 11.8A.

In terms of size, the panels are 1,727 x 1,039 x 30 mm and weigh 23.5 kg. They can be used at operating temperatures of -40 to +85°C and their operating temperature coefficient is -0.288% per °C, a very low number compared to the Perc modules.

PES: How many products are in the range?

FR: Our portfolio currently consists of some of the most in demand products in Europe. They are solar panels M8 IBC Ultra Black Glass-Glass 390| 400W, M8 HJT Ultra Black Glass-Glass 390| 400W and M7 Ultra Black Glass-Glass 410 W.

We also offer Energiewall LV 10 kWh and Energiewall HV 11kWh batteries. The Belinus Energiewall LV is a stackable AC battery system for private use. Its rechargeable LFP battery pack provides energy storage for solar self-consumption, timed control and backup.

The Energiewall LV is easily connected to the electricity of any house or building. The compact design achieves industry-leading energy density and is easy to install, allowing owners to quickly realize the benefits of reliable, clean energy.

A single module has a capacity of 5 kWh and can be expanded to a module of up to 40 kWh.

PES: Available in ultra black, are the main advantages of this colour aesthetics or does it have functional benefits too?

FR: Even though the ultra black design provides an elegant look and status on the roof, it is proven that this specific module is about 2% more efficient than the standard IBC modules. The IBC solar cell technology, or Interdigitated Back Contacts, is a technology that is used in the manufacture of Rear Contactsolar cells.

With this technology, the solar cells in the

panels can achieve higher efficiency. The process of energy conversion is thus put at the back of the panels as it were, so that the completely black IBC technology panels are much more effective than other technology panels and also have a more attractive look.

Our guarantee terms are one of the best on the market too, with a 35 year warranty that covers the shipping of new and old parts and the installation costs.

PES: And these are all made in Europe?

FR: Our products are made in Europe, in Bloomberg Tier-1 factories, with solar panels on the roofs providing an energy source for the factory. This reduces overall CO₂ emissions by up to 40% and protects the environment and the planet from the harmful effects of mass production.

PES: Are your products mainly chosen for residential purposes, or larger projects too?

FR: Our products are mainly used for residential purposes and small businesses. The value Belinus Solar Panels brought to our portfolio is extremely important for our German customers. We can now offer IBC glass-glass PV modules made in Europe with the longest 35 year all-in-one warranty and in ultra black, the most desirable aesthetic on German rooftops. Our partnership locally is guided by top expertise and know-how that allows us to focus on customer's needs to get the best results.

PES: You offer a 35 year guarantee, how is this made possible and what does it cover?

FR: Every component of our panels is designed with the greatest care to achieve maximum lifespan. In addition, the solar panels are thoroughly tested for long-term reliability and the components are subjected to a strict quality control process with several steps. That is why we dare to give you an all-in-one guarantee of 35 years*.

We provide pre-production quality control and all our orders are carefully prepared by a team of expert engineers. They check the factory locations, workshops and production lines specific to the order against a checklist of more than 1,000 points and all the findings are compiled into a report.

Our quality is regularly checked by independent test institutes, such as TUV SUD in Germany or IMEC in Belgium. This is how we guarantee that Belinus modules comply with the highest requirements and can withstand the toughest conditions.



Francis Rome

PES: How are you finding the market development for these products?

FR: Currently, there is a market demand for our products, with order numbers increasing day by day. We are happy that we get so many referrals from our existing and new clients. That emphasizes the fact that they are very much satisfied by our product and service. We'd like to develop new markets in Europe and Germany is one of our main target goals in the following years.

PES: What do you think the future holds for the industry? What innovations might we see coming through next?

FR: Solar energy has come a long way in a decade. Back in 2010, the global market was small and highly dependent on subsidy regimes in countries such as Germany and Italy.

In the coming years, technology improvements will ensure that solar becomes even cheaper. It could well be that by 2030, solar will have become the most important source of energy for electricity production in a large part of the world. This will also have a positive impact on the environment and climate change.

What this means is that solar will reach, in many parts of the world, a leveled cost of energy that will make it unbeatable compared to fossil fuels. Belinus will try its best to play a meaningful role in this process and we promise our customers up-to-date, innovative products, the best guarantee and warranty and the highest quality.

<https://belinus.be/>

