

Sharp PV panels withstand toughest costal climate conditions

Installation of the salt mist tested (IEC 61701) ND-RB series on an island.

Project: Las Palmas, Gran Canaria

Installation: Designed by Gesproyec Ingeniería e Instalaciones, S.L., (<u>www.gesproyec.com</u>),

directed by Mr. Adamán Mejías

Realized by Maintelca (www.maintelca.com), directed by Mr. Pedro García

Equipment supplied by: Tecatel, S.L. (www.tecatel.com)







Summary:

- 1009 ND-RB270 panels were used in the project, generating up to a total of 272 kW.
- Certified salt spray resistant Sharp panels were chosen due to the location of the plant 500m off shore of the Atlantic Ocean. Without protection, the salty air can ruin the PV panels and drastically reduce the life span of non-certified panels.
- On sunny days, the PV installation will supply all of the factory's energy needs making the factory independent of the local grid and radically reducing its energy costs, as electricity is very expensive on the island.
- This installation is one of the first of its kind in Gran Canaria. It was built by a private company
 and is part of the island's move from a carbon-based energy production towards renewable
 sources.

PV Panels

Product: Sharp ND-RB270

Number of modules: 1009 Rated power: 270 Wp

Cells: 60

Size: 1,650x992x35 mm

Efficiency: 16.5%

Other Components

11 inverters from SMA TRIPOWER with 25 kW each

Solar Power Plant

Plant size: 272 kW

Roof orientation: Northeast

Roof pitch: 20°

Earnings

On sunny days, the newly installed system will provide all of the plant's energy demands, making it independent of the local grid.



By 2020, Gran Canaria plans to get 25% of its energy from renewable energy sources

Gran Canaria is a Spanish island in the Atlantic Ocean. As on many remote islands, the energy is produced locally, making it much more expensive than on the continent. So far, Gran Canaria has relied on imported carbon sources, such as oil and gas, for its energy production. During the last few years, the island began introducing renewable energy sources such as wind and solar energy. The island's ambition is to generate 25% of their energy from clean sources by 2020. Moreover, the use of naturally present and free resources like sunlight and wind will reduce electricity cost dramatically.

The supplier says:

'We have had great experiences with Sharp solar panels in numerous projects in the industrial and electrical sector. Sharp is a well-known, reliable partner with high-performing products and a great guarantee policy. We are always happy to support our local partners with projects concerning Sharp panels. Mr. Pedro Garcia and his team from Maintelca completed an outstanding installation. Also, Mr. Mauro Cavaco, as a technician from Tecatel, has done a great job of advising and supervising the entire project'

Rogelio Rodríguez, Tecatel

The installer says:

'We are very satisfied with the panels, their performance and the guarantee policy, and we are delighted with all the local technical support that Tecatel provides.'

Pedro García, CEO of Maintelca





Challenging climate conditions

Sharp and Tecatel have supplied and supported one of the first PV installation projects on the island. The installation was carried out in a food factory. The plant is located close to the shore in Las Palmas, the capital of Gran Canaria. The production plant is located only 500m off of the Atlantic ocean. As the salty air is very harsh to the materials used in the PV panels, only certified salt spray resistant panels can be used. Sharp's reliable ND-RB270 panels, with their specific IEC 61701 certification, have been installed in various extreme climates around the world, such as Malawi and the Arctic Circle, and are equipped to cater to the particular environmental demands. Moreover, Sharp provides a 10-year product guarantee and a 25 year linear power output guarantee on all PV panels.

Reducing energy costs dramatically and improving customer image

1009 Sharp ND-RB270 modules were installed on the plant's roof, generating up to 272 kW of electricity – enough to meet all of the production plant's energy needs. The plant, mirroring the solar-production curve, produces energy seven days a week, and uses all the energy it has generated on site. However, if the company uses less energy, then the surplus energy could always be sold to the local grid. Given the huge savings from being almost enirely energy self-sufficient, the cost of the whole PV installation is expected to amortize within 5 years. Therefore, the company can save a lot on high local energy costs while improving their image as a responsible and sustainable company.

New!

New Sharp polycrystalline panels with 270 and 275 Wp (ND-AK series)





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