



## Ib-red and Cambium Networks Bring Gigabit Wireless Internet to Ciutadella's Old Town and Cala Llonga (Menorca)

A pioneering wireless network offering fibre optic speeds is deployed in the old town of Ciutadella and Cala Llonga.

In both urban centres, Ib-red has deployed Cambium Networks' multi-gigabit wireless technology using the 60 GHz band, bringing speeds similar to terrestrial fibre (100, 300, 600 Mbps and up to 1 Gbps) through wireless connections, without the need to trench for terrestrial cabling.

This project opens a new era of connectivity in Spain. Offering speeds even above 1 Gbps drives a new paradigm in the digitalisation of the country. Wireless fibre is the only option to enjoy quality Internet access in many areas of Spain and not only in empty Spain.



**FAMOUS FOR ITS OLD TOWN AND MEDIEVAL STREETS**, the the port city of Ciutadella, Menorca's former capital and the island's most populous municipality, was also the worst connected.

The city's Plaça des Born houses a Gothic-style town hall, the 19th-century Salort and Torresaura palaces, and the 14th-century cathedral of Santa Maria de Ciutadella, famous for its enormous marble altar and the Baroque-style chapel of the Almas. Cabling and terrestrial fibre optics have been forbidden at these landmarks. This situation condemned neighbours and shopkeepers to a scarce and very low-quality connectivity through old copper lines (ADSL).

Since a few weeks ago, the situation has changed radically and residents, shopkeepers and tourists can enjoy Gigabit Internet with maximum speed and low cost, thanks to the operator Ib-red and Cambium Networks' wireless technology.

"The deployment of fibre optics," explains Juan Ochogavía, Ib-red's Expansion Director, "was stopped dead in its tracks in the historic centre of Ciutadella due to the special heritage protection plan, limiting the development of daily activities carried out by businesses and residents over the Internet as they did not have an ultra-fast Internet service like in the rest of the city."

To solve this problem, the operator Ib-red, together with the technology giant Cambium Networks, have developed the first wireless fibre network with Gigabit speeds that currently serves a total of 200 homes and businesses in Ciutadella. It also serves Cala Llonga, a luxury development located north of Mahon where fibre optics is unfeasible.

In both urban centres, Ib-red has deployed Cambium Networks' multi-gigabit wireless technology, using a free use band (60 GHz), bringing speeds similar to those of terrestrial fibre (100, 300, 600 Mbps and up to 1 Gbps) through wireless connections, without the need to dig trenches for terrestrial cabling.

This wireless fibre optic service from Ib-red is an exponential improvement over ADSL and current radio link services. It is





a pioneering system that provides an Internet service of the highest quality and at an affordable cost to citizens and businesses.

Francisco Hidalgo, the CTO of Ib-red who is responsible for the project, explains that “in the historic centre of Ciutadella the deployment of fibre is paralysed due to heritage protection and in Cala Llonga there is no possible conduit to carry out the installation. There is no possible channelling to carry out this infrastructure. And somehow, they were condemned to have a very low-quality connection, a problem that is replicated more often than you might think.”


“The pilot project, which lasted two months and in which the entire infrastructure was verified and tested, offered speeds of 600 Mbps on a stable basis,” adds Francisco Hidalgo. “And if someone wanted 1 Gbps, we would give it to them, but today it is not necessary. None of the monitored companies have reached more than 200 Mbps at peak consumption.”

The terrestrial fibre point is less than 1 km away, where the Ib-red backbone is located, connected to the industrial estate with a 2,500 Mbps point-to-point system and, from there, to the companies’ antennas, which means that “users really receive fibre optic speeds unlike other wireless services,” adds the project manager.

For Javier Gómez, Cambium Networks’ director for Iberia and the Mediterranean, “this project opens a new era in connectivity in Spain. Offering speeds of up to 1 Gigabit drives a new paradigm in the digitalisation of our country. Wireless fibre is the only option to enjoy quality Internet access in many areas of Spain and not only in empty Spain.”

Juan Ochogavía, on his part, is very satisfied with the result of the project as “it gives meaning to our company philosophy: not to stop until we have a quality Internet connection





in every corner of the islands. We are the first Balearic company to make this project possible. Now Ciutadella and Cala Llonga can position themselves at the forefront of telecommunications like any other large city.”

This deployment complies with the Special Plan for the Protection of Ciutadella’s Historical and Artistic Heritage, approved on 24 April 1999. At the same time, it places Ciutadella at the forefront of telecommunications by having a pioneering wireless fibre network in Spain that offers up to 1 Gigabit bandwidth to residents and businesses at an affordable price.

## ABOUT CAMBIUM NETWORKS

Cambium Networks delivers wireless communications that work for businesses, communities, and cities worldwide. Millions of our radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition over traditional fiber and alternative wireless solutions. We work with our Cambium certified ConnectedPartners to deliver purpose-built networks for service provider, enterprise, industrial, and government connectivity solutions in urban, suburban, and rural environments, with wireless that just works.

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