

# CEMAFE Extends Connectivity with the Channel Bonding PTP 550 in Rural Argentina



“The installed equipment exceeded our expectations – we not only got the bandwidth proposed by the brand, but also at an affordable investment cost. With Cambium Networks PTP 550 there was a meaningful quality leap that improved users’ connectivity experience.”

- Ing. Alejo Martin,  
Owner, RFIT  
Comunicaciones

## Overview

**CEMAFE IS AN ARGENTINIAN INTERNET SERVICE PROVIDER** offering broadband connectivity and consulting in the rural stretches of San Juan Province. Due to the geography and remoteness of its coverage area, the delivery of high-speed Internet access to residents was both a logistical and economical challenge, one its existing infrastructure was inadequate to overcome.

CEMAFE was determined to find a solution that could satisfy the critical needs of their deployment. The new network would have to not only offer reliable, stable connectivity with low maintenance requirements due to hard-to-reach towers located at long distances from one another, but also do so at minimal cost. Cambium Networks’ combination of high performance and affordability in a rugged package offered CEMAFE the features their upgrade required.

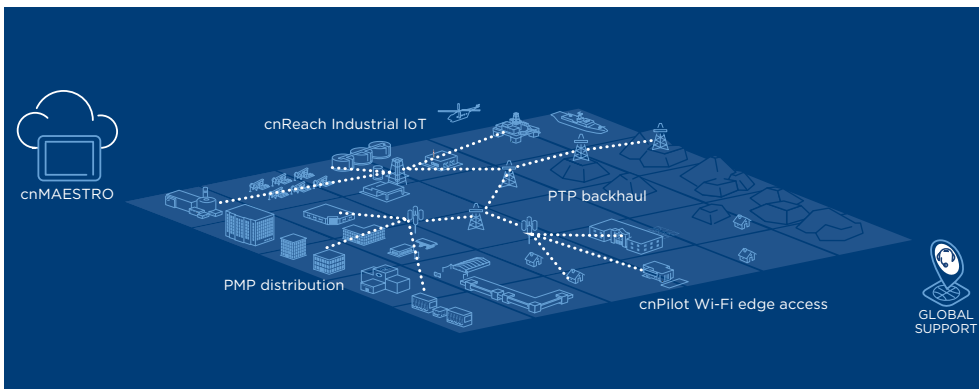
## Solution:

**CEMAFE PARTNERED WITH IT CONSULTANT RFIT, WHO BEGAN THE UPGRADE PROCESS WITH THOROUGH PRE-ENGINEERING PLANNING** using LINKPlanner software, enabling them to generate highly detailed specifications regarding tower placement, equipment needed, and configuration of devices. Once the technical feasibility of the link was planned, the physical installation was executed, followed by subsequent adjustments to alignment required to achieve the minimum bandwidths and signal levels indicated by LINKPlanner.



### WHY RFIT CHOSE CAMBIUM NETWORKS:

- Cambium Networks’ LINKPlanner software models complete network design according to the unique parameters of individual deployments.
- Cambium Networks solutions deliver reliable wireless connectivity that defies topographical challenges, enabling long range access for remote and rugged locations.
- The Cambium Networks PTP 550 has two radios built in, offering versatility in choosing channel size configuration.



**BEST PRACTICES:**

- Prioritize pre-deployment planning to ensure accuracy in installation locations, antenna sizes, and equipment configurations – especially in complex environments full of obstructions.

The upgrade consisted of Cambium Networks ePMP and PTP platforms – a PTP 550 connectorized link with 3-foot antennas to carry 200 Mbps over the longest distance of 49 km using two 20 MHz channel bandwidth, and Force 300 technology for last mile delivery – managed by the end-to-end wireless network management system cnMaestro™. The PTP 550 was of particular benefit for CEMAFE due to its channel bonding capability that protects against disruption of service. PTP 550’s dual radios offer assurance that if either radio is subjected to interference or other impairment, the data from first radio will be moved to second radio, so the link over all continues to operate. After the first radio comes back up, the data gets sent on both radios.

**Results:**

**AFTER INSTALLATION, CEMAFE WAS ABLE TO DELIVER MORE BANDWIDTH,** faster, and with lower latency.

The ISP continues to migrate its backbone onto Cambium Networks products, growing its customer base as it enjoys an excellent return on investment.

