

CASE STUDY

El Conquistador deploys SmartFM on their FM network

Reducing energy consumption and improving audio quality go hand-in-hand

Santiago, Chile

HIGHLIGHTS

User: Alejandro Noemi Hauck
Technical Manager, El Conquistador FM



Products:

SmartFM technology

A sophisticated software technology which brings up to 40% energy savings to FM transmission. Hosted on Ecreso FM transmitters.

5-band sound processor

The multiband sound processor is a fully digital processor hosted in the transmitter's direct-to-frequency digital modulator.

Developed by: WorldCast Systems

Main benefits for El Conquistador FM:

- Up to 40% energy savings
- Improved sound quality
- Reduced maintenance
- WorldCast Systems support

Compatible



CONTEXT

Alejandro Noemi Hauck is a well-known radio engineer at [El Conquistador FM](#), **one of the most important groups in Chile**. El Conquistador began with 1 station in Santiago over five decades ago and today is nationally established with 50 stations throughout the country. Alejandro operates three Ecreso FM 1000W transmitters, broadcasting in three cities, all deployed with SmartFM technology and a 5-band sound processor.



CHALLENGE

As for all radio broadcasters - staying on-air with the highest quality audio is vital. That is why El Conquistador only selects equipment from the best and most renowned manufacturers and brands. However, Alejandro explains that cost savings and limiting consumption are also increasingly a key objective. Multiple factors play into this such as system efficiency, reliability, and cost of maintenance. The transmitters Alejandro was using prior to Ecreso were unfortunately not optimal in terms total cost of ownership. **Alejandro was looking for a solution that would better fit their needs: to lower their operating costs while improving the quality they deliver to their audience.**

“SmartFM is a breakthrough innovation every FM broadcaster should deploy.”

Alejandro Noemi – El Conquistador

SOLUTION

After 4 years of positive experience with the Ecreso FM 1000W, with its already high level of efficiency and its field-proven reliability, Alejandro jumped on the opportunity to activate the newly released technology [SmartFM](#).

What is SmartFM?

SmartFM is a cutting-edge innovation for FM radio which enables broadcasters to reduce their energy costs by up to 40%. This sophisticated software, in Alejandro's words, "is incredible to see operate automatically according to the program content". After testing the on-air programs at the edge of the coverage zone, Alejandro surprised by the results, confirms that SmartFM does not impact the listening experience.

This innovation represents for El Conquistador, **a huge step forward for radio during a time when energy is expensive and businesses need to limit their consumption.** "SmartFM is a breakthrough innovation every FM broadcaster should deploy", he says. With the Ecreso FM 1000W, they were already happy with its good performance, but with SmartFM they are saving even more and the "improvement is significant". It was activated through a simple software upgrade.

5-Band Sound Processor

Along with SmartFM and in line with their objective to deliver great sound, the radio broadcaster also uses the built-in [5-band sound processor](#). According to Alejandro "when I heard the 5-band sound processor, I just fell in love with it". He loved it so much that he replaced the ones he was using from a renowned brand in audio processing, with WorldCast Systems' solution. The result? Outstanding reliability as no additional hardware is required AND amazing sound that you can personalize for your station.



Photo legend: Interface of 5-band sound processor

RESULT

Not only does Ecreso FM 1000W meet El Conquistador's needs with reliability and great audio, but they also saw their power consumption drop noticeably. While already benefiting from a high efficiency of up to 72%, once SmartFM activated, they started to reap the benefits of an unprecedented level of efficiency and savings! **When asked if he would recommend Ecreso, Alejandro answered: "YES, I would recommend Ecreso for the audio quality, the very good transmitter performance, and especially SmartFM - which is an impressive innovation!"**.

"SmartFM is a great contribution to FM radio. By controlling their signal, transmitters are very efficient and we are seeing a noticeable improvement in cost savings. This technology operates amazingly, it doesn't show any difference on the coverage and the savings are substantial."