

# Signal Boosters

Digital, Analog and Cellular



**fiplex**



**Fiplex** commitment is to deliver highly reliable, quality products. Through our constant Research & Development, we have a reputation of producing unique solutions, and quickly responding to your custom requests when needed.

## SIGNAL BOOSTERS

Fiplex indoor and outdoor coverage extension solutions are designed to satisfy the rigorous demand for providing service in areas outside the reach of the base stations be that voice communications, data and wireless internet.

Thanks to the modular philosophy of the design, the Fiplex coverage extension solutions allow for the ability to provide services from one operator and in one band to multiple operators using diverse bands, covering needs from FM to LTE, permitting the coexistence of differing technologies simultaneously, without any quality of service degradation.

### Products

- Bandwidth Adjustable Signal Boosters – VHF and UHF
- Band Selective Dual Sub Band Signal Boosters – UHF
- Public Safety Bandwidth Adjustable Signal Boosters – 700 and 800MHz
- Public Safety Dual Band Bandwidth Adjustable Signal Boosters – 700 and 800MHz
- Public Safety Ultra-Compact Signal Boosters – 700 and 800MHz
- Compact Cellular Repeaters

## DIGITAL SIGNAL BOOSTERS

In highly congested communications areas, there is only one solution: **Fiplex Digital Signal Boosters**. This state-of-the-art technology allows the end user to select desired frequencies to be amplified, enhancing the indoor coverage, while retaining the BTS sensitivity. Thanks to the uplink squelch that only activates the UL amplifications while signals are present in that specific channel end for a specific time slot, reducing the overall UL noise!





Fiplex Digital Signal Boosters were developed to:

- Reduce antenna isolation and improve coverage extension,
- Optimize spectrum use by working with the same BTS channels (Frequency received = Frequency transmitted),
- Reduce hardware and maintenance costs, as it only requires one unit to be installed at the remote site.

The use of digital signal processing technology provides the traditional RF Signal Boosters with several features that increase their feature set and benefits:

- Built-in spectrum analyzers for a more efficient and simple system setup and operation,
- Uplink squelch capability compatible with analog and digital format per-channel and per-time slot; reducing the desense of the base station,
- Multiple different filter shapes selection in order to meet the requirements of different RF congested scenarios.
- Available in VHF, UHF, 700 and 800 MHz.
- Compatible with Tetra, P25 Ph1, P25 Ph2, DMR, Nexedge, among others.

## DIGITAL SIMPLEX SIGNAL BOOSTERS

Fiplex has developed a new line of **Digital Simplex Signal Boosters** intended to provide indoor coverage extension to radio equipment operating in SIMPLEX mode.

Being channel selective, this product operation allows the handling of specific channels, up to 12 simultaneously.

A solution based on Digital Signal Processing, FPGA based, which permits a more precise operation compared with traditional analog systems.

Digital Simplex Repeaters (DSR) are equipped with 4 antenna ports: Inbound in, Inbound out, Outgoing in, Outgoing out.

Furthermore, the sensitivity of these Digital Signal Boosters is user programmable per channel and per direction.

- Available in VHF, UHF, 700 and 800 MHz.

## ECHO CANCELLATION DIGITAL SIGNAL BOOSTERS

Thanks to digital signal processing technology and state of the art firmware design, **Fiplex Echo Cancellation Digital Signal Boosters** feature an echo cancellation functionality, which allows for an easy and simple application of the Signal Boosters as outdoor signal extenders. Echo cancellation refers to the intelligent capability the digital Signal Booster has to understand which received signals are "feedback signals" and cancels them out, preventing the system from going into an unstable operating condition, as well as providing the highest quality of continuous service due to the non-degradation of the amplified signals.

- Available in VHF, UHF, 700 and 800 MHz.
- Compatible with Tetra, P25 Ph1, P25 Ph2, DMR, Nexedge, among others.







**Fiplex Communications, Inc.** is a designer and manufacturer of highly innovative and cost-effective electromagnetic devices and subsystems for private and public telecommunications applications, recognized worldwide.

Being an engineering driven company with +30 years of experience in the market, Fiplex supplies a wide line of passive and active products for the Telecommunications Industry, which includes standard and customized solutions for:

- Two-Way Radio and Public Safety
- Coverage extension (indoor and outdoor)
- Public Safety Central Digital DAS
- Broadcast (TV, digital TV and FM)

Through constant Research and Development, Fiplex is always striving to amplify the breadth of its product lines, while quickly responding to its clients' custom requests when needed.

Our goal is total customer satisfaction, based on a high quality product commitment.

We strive to be a leader of high tech products for private and public sectors; such as military, police and civil defense.



**North America Headquarters**

7331 N.W. 54th Street  
Miami, FL 33166.  
United States  
Ph: +1 305 884 8991  
Fax: +1 305 884 4041

**Europe & EMEA Office**

Calle Medes, 4-6, Local.  
08023 Barcelona.  
Spain  
Ph: +34 93 551 9746  
europe.sales@fiplex.com

[www.fiplex.com](http://www.fiplex.com) - [info@fiplex.com](mailto:info@fiplex.com)