



Cel-Fi™ PRO Smart Signal Booster™

Improve voice and data coverage for 3G, 4G and LTE



NEXTIVITY'S 3RD GENERATION Cel-Fi SYSTEM adds substantial capability over our previous versions. The Cel-Fi Pro is designed to dramatically improve voice and data coverage in up to four bands for 3G, 4G and LTE for consumers while significantly improving network capacity.

Good things do come in small packages: Now with LTE support, Cel-Fi is compatible with the highest data services application available. All new patented echo cancellation algorithms enable Cel-Fi to offer even higher signal levels throughout the coverage area than before.

BENEFIT TO CONSUMERS

Improved Voice Coverage: Enables clear and reliable voice connections within the coverage area –13,000 Sq. Ft.

Improved Data Throughput: For indoor areas with poor reception, Cel-Fi offers significant data throughput improvements for HSPA+ or LTE – often achieving a 4x improvement.

Improved Battery Life: Cel-Fi manages the power levels between the cell tower and user devices so that subscriber devices enjoy significant improvements in battery life.

Ease of Installation: Cel-Fi is a true “Plug and Play” system that doesn't require the installation of external antennas, bulky coaxial cables or a configuration set-up by the subscriber. In fact, Cel-Fi intelligently and automatically senses and adapts to its environment – including changes made by the Operator or those caused by nearby user equipment like WiFi, or other Cel-Fi devices.

BENEFIT TO OPERATORS

Reduced Churn: Fewer dropped calls and higher data rates help ensure customer retention.

Higher Data Service Usage: By supporting advanced multi-carrier features, the third generation Cel-Fi system ensures that customers can maximize their data rates.

Decreased Operational Cost: Lowers cost of indoor coverage and increases capacity of WCDMA and LTE networks.

Network Safe: Cel-Fi's embedded System-On-a-Chip technology provides real-time and automatic end-to-end gain control, thus guaranteeing it will complement the existing macro network's capabilities.

Operator Specific: Cel-Fi's On-Board IntelliBoost processor securely manages the enhanced services only for the Operator who authorized the system.

Self Adjusting: Cel-Fi automatically selects the correct frequencies for use based on channel frequency and Operator PLMNID codes, thereby eliminating additional and costly Operator provisioning efforts.

Multi Technology Support: The Cel-Fi Pro can support both WCDMA and LTE across four different cellular bands in the same system.

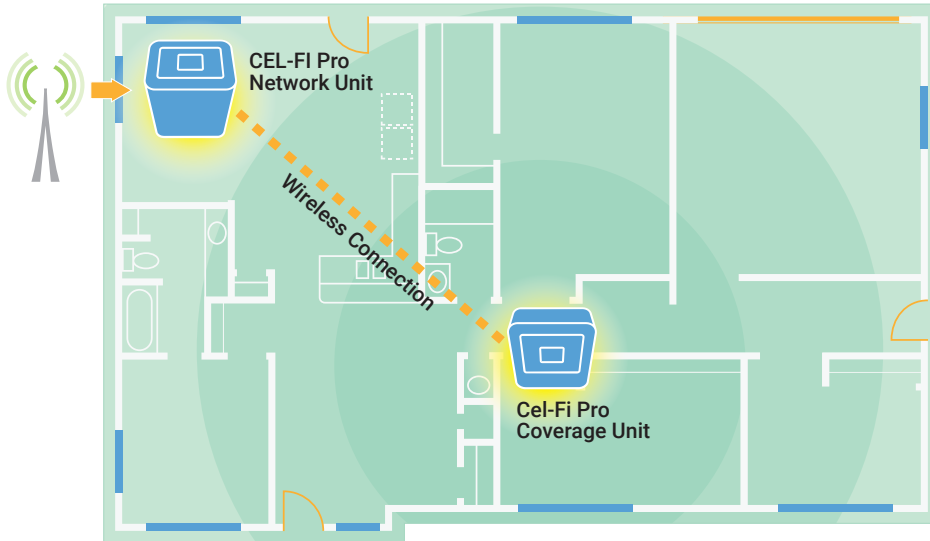
Multi Carrier Support: The Cel-Fi Pro system simultaneously supports multiple carriers with bandwidths anywhere from 5 to 20 MHz with a total system bandwidth of 35 MHz.



Cel-Fi Safe

Cel-Fi Features

- Fully wireless, plug-and-play quad-band architecture for supporting—WCDMA/HSPA+/LTE, with up to 100dB of system gain in each band simultaneously.
- Patented 2-unit, 3-hop system allows flexible placement for optimal coverage.
- Processor running advanced digital echo cancellation and channel select filtering algorithm.
- Software-based optimization of integrated antenna coverage pattern which maximizes system gain and provides improved coverage and signal quality.
- Automatic Gain Control (AGC) continuously monitors system path loss and transmit power to deliver maximum gain.
- Intuitive LCD User Interface (UI) allows quick and easy installation by end-user.



Network-Safe Features

- Securely provisioned operation with ciphered software which only operates on authorized Operator's network.
- Network-Safe software prevents uplink system gain from exceeding path loss, and eliminates unnecessary rise in base station noise level.
- Uplink Muting Mode automatically shuts down uplink cellular transmissions when no active user equipment is detected.
- Embedded software ensures optimal performance and prevents out-of-specification operation.
- System shuts down upon Operator's network command or failure detection.
- Maintains end-to-end cellular communication encryption without additional risk of vulnerability.
- Peaceful coexistence with adjacent Cel-Fi systems, 802.11a/ac/b/g/n, cellular, and femtocell devices.

High-Level Specifications

- Support for 3GPP HSPA Rel. 10 features and 3GPP LTE Release 10 Features
- 5GHz link compliant with FCC Part 15 and EN 301 893
- Up to 100dB path loss between units (approximately 20 meters between NU and CU)
- Max EIRP for Multiple carriers: 16dBm downlink & 24dBm uplink
- Auto-Configuring "All band scanning" feature to self adjust as Network channels change
- Multiple band configurations available. Check with your Sales rep for details.

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Specifications

NETWORK UNIT

179MM (7.05") H	110MM (4.33") D
155MM (6.10") W	Weight: .54kg (19oz)

COVERAGE UNIT

160MM (6.30") H	79MM (3.11") D
164MM (6.46") W	Weight: .45kg (16oz)

ENVIRONMENT

- Operating temperature: 0° to 40°C
- Storage temperature: -25° to 60°C
- Relative humidity: 5 to 95%, noncondensing
- 3GPP TS 25.143 Rel.10
- 3GPP TS 36.143 Rel.10

STANDARDS

- FCC Parts 15, 20, 22, 24, 27
- RoHS II 2011/65/EU
- IC (Industry Canada)
- EAC (EurAsian Conformity Mark)
- R&TTE 1999/5/EC
- R&TTE 1999/519/EC
- EN 60950-1:2006+ A11/A12/A1/A2
- EN 301 489-23 v1.5.1
- EN 301 489-17 v2.2.1
- EN 301 908-1 v5.2.1
- EN 301 908-11 v5.2.1*
- EN 301 908-15 v5.2.1*
- EN 301 893 v1.7.1*
- EN 62311 (2008)
- * with deviation

POWER

- 12 VDC via external supply (2 included)
- External supply: 100 to 240 VAC, 47 – 63Hz
- Power consumption less than 25W per unit

FCC REQUIREMENTS

This is a **CONSUMER** device.

BEFORE USE, you MUST REGISTER THIS DEVICE with your wireless provider and have your provider's consent. Most wireless providers consent to the use of signal boosters. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.

You **MUST** operate this device with approved antennas and cables as specified by the manufacturer. Antennas **MUST** be installed at least 20 cm (8 inches) from any person.

You **MUST** cease operating this device immediately if requested by the **FCC** or a licensed wireless service provider.

WARNING: E911 location information may not be provided or may be inaccurate for calls served by using this device.

When used with any mobile device utilizing the 1710-1755 MHz band, the FCC limits booster equipment placement to a maximum of 10 meters above ground level. Installation of this equipment which does not comply with federal requirements may subject the owner to FCC enforcement action.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

COMPLIANCE CONTACT: In the event of regulatory compliance issue, please contact Nextivity Inc. directly. Contact information is available at www.nextivityinc.com.

PATENTS: This product is covered by Nextivity, Inc., US patents and patents pending. Please refer to Cel-Fi.com for details.

cel-fi.com/support