



CEL-FI[®] Smart Signal Booster for AT&T or T-Mobile Networks



No outdoor antennas,
no cabling, no signal
interference, no worries.

The Next Generation...



Nextivity's second generation Cel-Fi RS-2 is a cost-effective intelligent indoor coverage solution for WCDMA/HSPA+, designed to dramatically increase indoor voice quality and data throughput for 3G/4G users while significantly improving network capacity for carriers.

Breakthrough, patented technology enables a wireless, indoor, plug-and-play, user installable coverage solution.



Cel-Fi Smart Signal Booster: a new generation all-digital smart signal booster that outperforms analog repeaters, Cel-Fi enables clear and reliable indoor 3G and 4G voice and data connections.



Pure plug and play: no need for external antennas or cables. It auto-configures itself right out of the box.



FCC compliant: Cel-Fi is the only booster approved by the FCC for 100dB gain – that's 1,000 times greater gain than analog boosters.



Carrier approved: Cel-Fi has been approved by T-Mobile and AT&T for use on their networks.



Advanced technology: Cel-Fi system is powered by two proprietary multi-core processors.



Wider coverage: users get up to 13,000 sq. ft. coverage, making it ideal for large homes and offices.

Wireless-in/wireless-out: radically different from traditional repeaters, Cel-Fi is the only intelligent booster that's wireless-in/wireless-out. The Window Unit receives the signal from the mobile network (it works with as little as one bar, or -104 dBm RSCP) and relays it wirelessly to the Coverage Unit that amplifies it for up to 100 dB of gain.

Fast data speed: for indoor areas with poor reception, Cel-Fi offers significant data speed improvements – often in excess of four times the current rate.

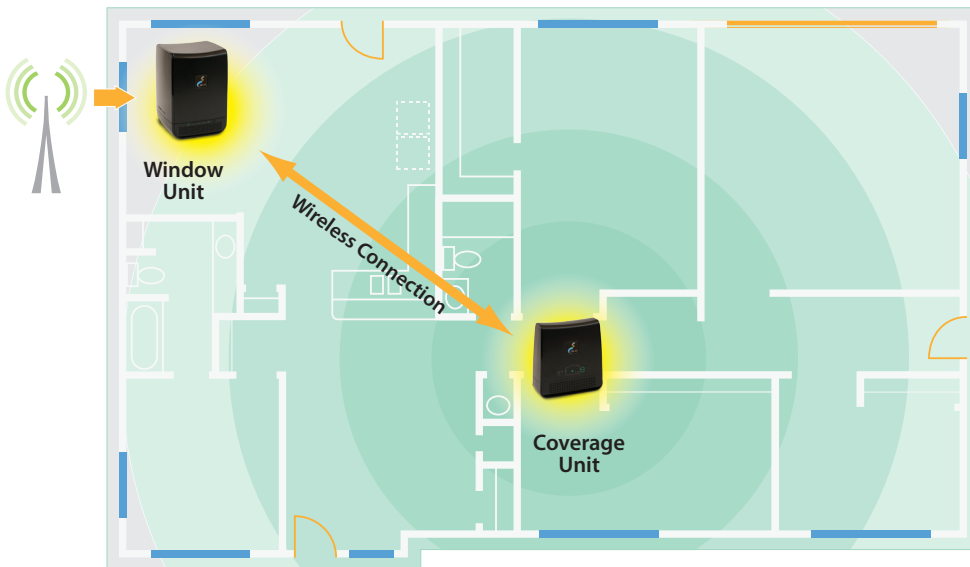
Easy on mobile phone battery: when a mobile phone no longer has to use all of its energy trying to reach out to a far away cell site, it lasts longer and requires less charging.

Ease of installation: Cel-Fi is a true "Plug and Play" system that doesn't require the installation of external antennas, bulky coaxial cables, handset registration, or a configuration setup by the user. In fact, Cel-Fi intelligently and automatically senses and adapts to its environment – including to changes made by your carrier, or to changes caused by nearby equipment like Wi-Fi, or other Cel-Fi devices.

Self adjusting: Cel-Fi's embedded system-on-a-chip technology automatically selects the correct frequencies for your carrier.

Cel-Fi Features

- Fully wireless, plug-and-play architecture for supporting band II and IV or band II and V - WCDMA/HSPA+ with up to 100 dB of system gain.
- Patented 2-unit, 3-hop system allows flexible placement for optimal coverage.
- Multi-core 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, independently for each channel.
- Intuitive LED User Interface allows quick and easy installation by end-user.



Network-Safe Features

- Securely provisioned operation with ciphered software which only operates on authorized carrier's network.
- Network-safe algorithms prevent 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.
- Maintains end-to-end cellular communication encryption without additional risk of vulnerability.
- Peaceful coexistence with adjacent Cel-Fi systems, 802.11 a/b/g/n, cellulars.

Processor

- Nextivity's IntelliBoost Baseband Processor II

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.

Changes or modifications not expressly approved by Nextivity, Inc. could void the user's authority to operate the equipment.

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

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Specifications

WINDOW UNIT

H: 199MM (7.83") D: 147MM (5.79")
W: 144MM (5.67") Weight: 0.86kg (1.9lbs.)

COVERAGE UNIT

H: 158.5MM (6.24") D: 59MM (2.32")
W: 146MM (5.75") Weight: 0.39kg (.81lbs.)

ENVIRONMENT

- Operating temperature: 0° to 40°C
- Storage temperature: -25° to 60°C
- Relative humidity: 5 to 95%, non condensing
- Operating altitude: -60m to 3,050m
- Storage altitude: 12,000m
- RoHS (2002/95/EC) six of six compliant
- WEEE (2002/96/EC)

3GPP COMPLIANCE

- 3GPP TS 25.143 Rel.8

SAFETY

- EN60950-1:2005 +A1:2010
- EN62311:2008 1999/519/EC EMF
- UL/CS 60950-1 2005 2nd ED

EMC/EMI/IMMUNITY

- EN55022 Class B
- EN 301 908-1,11
- EN61000-3-2, 3
- FCC Part 20 (RS224)
- EN61000-4-2~6,11
- FCC Part 22
- EN 301 489 -1,17, 23
- FCC Part 24
- EN 301 893 V1.5.1
- FCC Part 27

POWER

- 12VDC via external supply (2 included)
- External supply: 100 to 240 VAC, 47 – 63 Hz.
- Power consumption less than 17W per unit

CERTIFICATIONS

CE Mark • CB Mark • UL Mark (RS225)

HIGH-LEVEL SPECIFICATIONS

- Support for 3GPP Rel. 8 features
- 5 GHz link compliant with ETSI EN301 893 V1.5.1 or FCC Part 15
- Up to 100 dB path loss between units (approx. 20 meters between WU and CU)
- Max Band 1, 2 and 4 EIRP for 3 carriers: 14.7 dBm downlink & 26.2 dBm uplink
- Max Band 5 and 8 EIRP for 3 carriers: 12.7 dBm downlink & 23.2 dBm uplink
- Up to 100 dB system gain
- Availability greater than 99.9%