



# CEL-FI PRO for AT&T

## Smart Signal Booster® for 3G, 4G, LTE and VoLTE



COVERAGE UNIT

NETWORK UNIT



The Cel-Fi is designed to dramatically improve voice and data coverage in up to four bands for 3G, 4G, LTE and VoLTE.

### System Features

- The highest performance, fully-certified, signal booster possible in the power class providing maximum gain of 100dB. Cel-Fi provides 30dB more gain than Safe Harbor I and is approved under FCC Safe Harbor II.
- Cel-Fi is engineered differently from traditional repeaters. Cel-Fi is the only intelligent booster that's wireless-in/wireless-out. The Network Unit receives the signal from the mobile network (it requires as little as one bar of signal, or -104dBm RSCP, and -120 dBm RSRP) and relays it wirelessly to the Coverage Unit that amplifies it for up to 100dB of gain.
- Cel-Fi provides coverage up to 13,000 sq. ft., making it ideal for large homes and offices. Multiple Units of Cel-Fi can be deployed in larger office settings to support greater coverage footprints.
- Plug and play, simple installation, no external cables, antennas, wires, or drills needed. Clean and compact industrial design.
- Supports 60 simultaneous users. No user handset registration is required when using Cel-Fi.
- End-to-end cellular communication encryption without additional risk of vulnerability.
- Support for the Nextivity *Wave* mobile & desktop application.
- Peaceful coexistence with adjacent Cel-Fi systems.
- Intuitive LCD User Interface (UI).
- Patented 2-unit, 3-hop system.
- Tech Mode (engineering screens) available for advanced users.
- Mounting brackets included for wall or ceiling mount for maximum spatial flexibility.

### Wireless Features

- Supports WCDMA/HSPA+/LTE (FDD).
- Up to 100dB of system gain in each band, simultaneously.
- Wirelessly (5GHz U-NII) linked Network and Coverage Units.
- Peaceful coexistence with adjacent Wi-Fi (2.4 GHz & 5 GHz) and femtocell devices.

- Software-based optimization of integrated antenna coverage pattern which maximizes system gain and provides improved coverage.
- Automatic Gain Control based on real-time echo-cancellation.
- Adaptive signal equalization.
- Nextivity's 3rd-generation (ARES) chipset with 6 core processor

### Mobile Network Features

- Up to four (4) cellular bands supported. Cel-Fi PRO boosts service in the U.S. for AT&T only.
- Support for E-UTRA bands 2 (1900), 4 (1700/2100), 5 (850) and 12/17 (700).
- Support for 3GPP Rel. 10 features.
- Seamless integration with the Macro networks. No handset registration, GPS signal requirements, or call handoff problems.
- Secure and ciphered provisioning.
- Max EIRP; 10dBm downlink & 24dBm uplink, per band.
- 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.
- System shuts down upon Operator's network command or failure detection.

### System Benefits

- Users can be assured communications are secure, through the encrypted wireless link.
- Registration, Software Updates and Tech Mode support with the *Wave* mobile app allowing installer to easily collect network information.

### Wireless Benefits

- Enables the system to communicate with smart phones and the Cel-Fi *Wave* mobile app for improved functionality.
- Cel-Fi remains fully functional, even when there are other RF emitters present.
- Subscriber devices enjoy significant improvements in battery life.

**USA Model available for AT&T**  
**Supports Bands 2/4/5/12**

RF Specification	P34-2/4/5/12
<i>1st Channel</i>	B12
Frequency	729-746 & 699-716
Duplex distance	30
Maximum Relay BW	10MHz
Power UL single chan (dBm)	20 Total
Power UL 2 chan (dBm)	20 Total
Power UL 3 chan (dBm)	20 Total
Power UL 4 chan (dBm)	20 Total
UL min Ant Gain	2
Power DL	10 per 5MHz
<i>2nd Channel</i>	B4
Frequency	2110-2155 & 1710-1755
Duplex distance	400
Maximum Relay BW	20MHz
Power UL single chan (dBm)	22 Total
Power UL 2 chan (dBm)	22 Total
Power UL 3 chan (dBm)	22 Total
Power UL 4 chan (dBm)	22 Total
UL min Ant Gain	4
Power DL	10 per 5MHz
<i>3rd Channel</i>	B5
Frequency	869-894 & 824-849
Duplex distance	45
Maximum Relay BW	15MHz
Power UL single chan (dBm)	20 Total
Power UL 2 chan (dBm)	20 Total
Power UL 3 chan (dBm)	20 Total
Power UL 4 chan (dBm)	20 Total
UL min Ant Gain	2
Power DL	10 per 5MHz
<i>4th Channel</i>	B2
Frequency	1930-1990 & 1850-1910
Duplex distance	80
Maximum Relay BW	20MHz
Power UL single chan (dBm)	22 Total
Power UL 2 chan (dBm)	22 Total
Power UL 3 chan (dBm)	22 Total
Power UL 4 chan (dBm)	22 Total
UL min Ant Gain	4
Power DL	10 per 5MHz

**Environmental**

- Operating temperature: 0° to 40°C
- Storage temperature:-25° to 60°C
- Relative humidity: 5% to 95%, noncondensing

**Power**

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

**Physical Specification**

**Network Unit:**

179 x 155 x 110mm, Weight 19oz.

**Coverage Unit:**

160 x 164 x 79mm, Weight 16oz.

**Certifications & Compliance**

- CE
- FCC Parts 15, 20, 22, 24, 27
- RoHS (six of six) / WEEE (2002/96/EC)

**Design:**

Designed by Nextivity, Inc., in San Diego, California, USA

**Patents:**

This product is covered by Nextivity, Inc., US patents and patents pending. Please refer to CEL-FI.com for details.

**FCC Statement (Applicable in US only)**

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 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