



Solving Cellular Coverage Issues

The Ultimate Buyer's Guide

ENTERPRISE



SMB



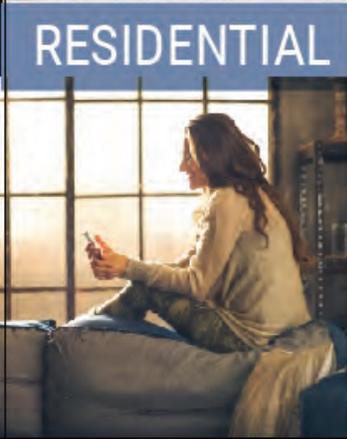
INDUSTRIAL



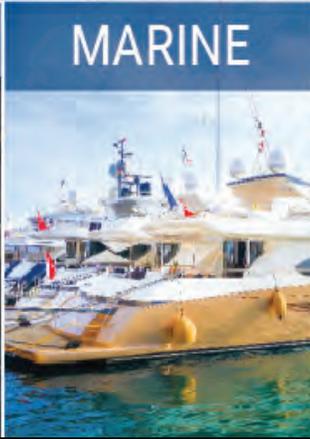
IOT



RESIDENTIAL



MARINE



VEHICLE



PUBLIC SAFETY



Performance Leadership



Ease of Install



Leaders in Value



Fastest Project Timeline



Carrier Grade



Why Does Poor Cellular Coverage Exist Today?

Cellular signals can be inhibited or blocked by trees, hills, building materials, and bad weather — regardless of the carrier you use.

Building Materials Block Reception



Brick



Concrete



Walls



Metal



LEED Certified Glass

Obstruction from Tower



Mountains



Buildings



Weather



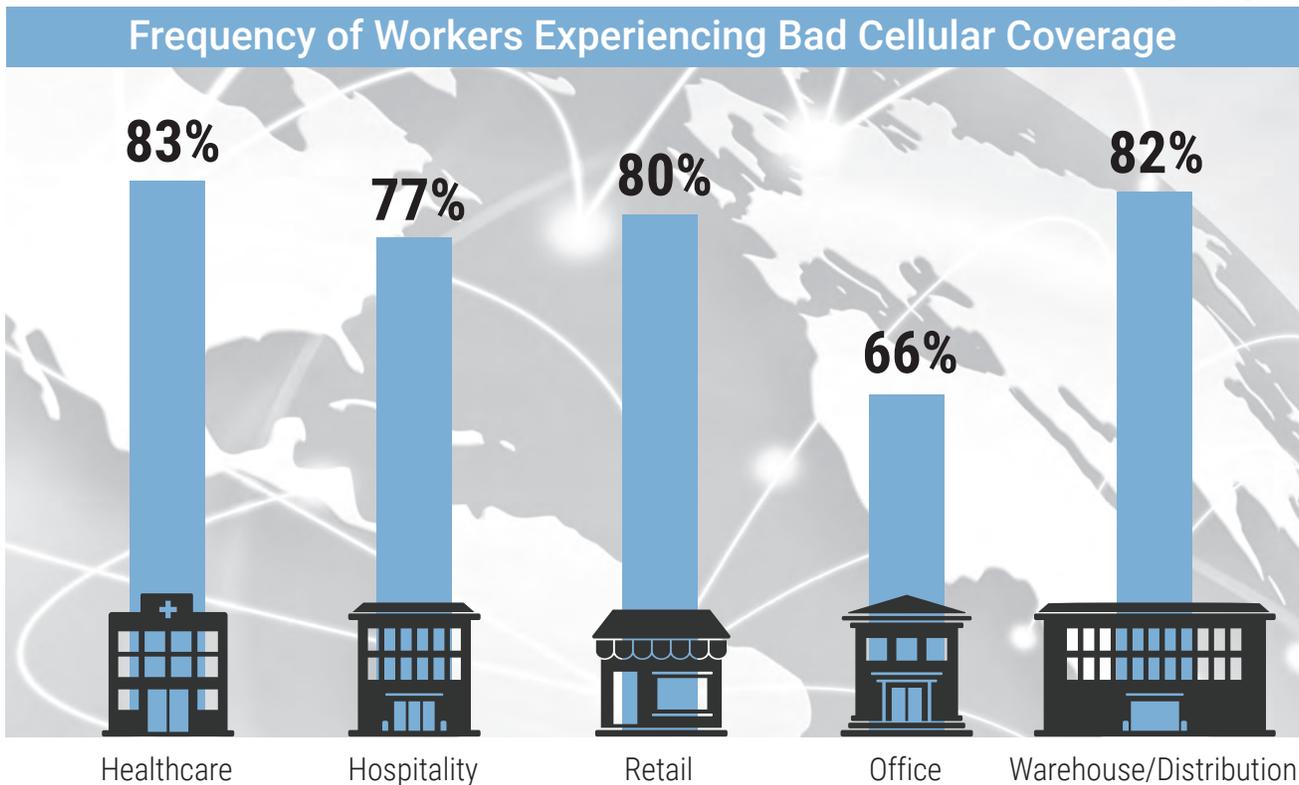
Trees



How common is poor in-building cellular coverage?

Spotty indoor cellular coverage and dead zones are nothing new. In fact, many of us have experienced these first hand as employees or customers.

Source Zinwave 2017



Poor Cellular Coverage is Not an Option

The world has moved to mobile... personal, professional, and public safety initiatives all employ cellular, all the time. But there are answers to this problem.



Understanding the Problem: Check Your Signal Strength

Cell Phone Bars

The bars on your handset or tablet can be confusing as they do not always show raw signal strength, as one might expect. Almost all mobile manufacturers have their own algorithm to calculate things like signal strength, signal-to-noise ratio (SiNR), and channel loading among other things. The bars on the phone often paint an inaccurate picture, or don't tell the whole story.

Check Your Raw Signal Strength

Every mobile device has different algorithms for selecting bars and the method of putting your phone into Field Test Mode. Placing your phone into Field Test Mode will allow you to view raw signal strength. Raw signal is the only way to get true signal strength readings from most smartphones. Additionally, there are a variety of free applications that provide some deeper insight into the signal quality.

Deciphering What Raw Signal Strength Means to You

Keep in mind, a larger number is a stronger signal. For example, -75 is stronger than -100. For example, if your signal strength jumps from -111 to -100 with Cel-Fi your signal is 10 times stronger than it was without Cel-Fi.

The cellular scale is not 0 to 100, but the range of usable cellular LTE signal is -120dBm (just barely usable) to -60dBm (about the best you will find).



WEAK: **-105 dB Signal Receive Power (RSRP)**
HEALTHIER: **+5.4 dB SiNR Signal Quality**

STRONG: **-64 dB Received Signal Strength**
POOR: **-1.5 dB SiNR Signal Quality**

Our Goal is the Best Donor Signal

Some handsets may take signal quality into account when calculating the number of signal "bars" to display. This makes sense because signal quality drives data rates and the user experience more than raw received signal strength.



Understanding the Solutions: Hype vs Reality

Wi-Fi Calling

The Hype: Wi-Fi Calling can be used anywhere, anytime.

The Reality: No, it can't.

Wi-Fi Calling is only available in some contexts. An underlying problem is that many enterprises experience poor Quality of Service (QoS). Wi-Fi spectrum is unlicensed, best effort, and hotly contended for by all of the new IoT things connecting to Wi-Fi. Wi-Fi 6 helps, but it's still Wi-Fi.

In a business context, Wi-Fi is sufficient as a data layer only. Wi-Fi Calling only works with certain cellular devices, it's quirky in practice, and those devices need to be attached to the WLAN.

There can also be issues relating to the handover of cellular calls when a caller is on the move. Managed Wi-Fi services help, but Wi-Fi calling may not be good enough for some enterprise applications or specific business demands. After one or two important call drops or misses, many enterprises move away from Wi-Fi-first calling strategy.

Small Cell

The Hype: Call your carrier, order a small cell or two. Simply drop them into your building and connect them to the Internet. Problem solved!

The Reality: It's not quite that simple.

Outdoor small cells are going to be ubiquitous as a core part of the 5G networks. Indoors, small cells are a mixed bag. Some operators are incorporating small cells into their strategies, others are less confident. They continue to improve each year with advanced technologies, such as interference cancellation and SON (self-organizing network) capabilities. Unlike Wi-Fi, which can be quite inexpensive, small cells (i.e. femtocells and picocells) are typically \$3K to \$5K each for the hardware, with 5G being more. Not all small cells are created equal in terms of ease of setup and performance.

There are a few key issues related to small cells.

First, similar to Wi-Fi, the coverage footprint is highly dependent on the interior layout of the indoor space, specific alignments, and other factors that may inhibit the spread of the signal.

Second is backhaul. In addition to a general bandwidth requirement (30-40mbps+), some small cells actually require specific and detailed IP settings that may require professional-grade IT skills to install, setup, and maintain.

Third is performance. Although small cells have improved, users can still experience dead or poor-performance spots within a facility as a result of interference. And they are still point solutions. It can be impossible to meet the coverage distribution needs of an entire space with one or two small cells, due to common interior signal blockers.

Active DAS (aDAS)

The Hype: aDAS is expensive, but high performance. In all but the largest installations (1MM square feet and above), aDAS is not a viable solution

The Reality: There's some truth to that, with exceptions.

In some areas the hype and the reality are fairly well-aligned. aDAS is expensive and it is high performance. Some aDAS providers are working on smaller footprint solutions for the middleprise (mid-sized enterprise) space. While capex costs are coming down, aDAS still requires an infrastructure ecosystem, which adds to the cost and time to deploy. Most active DAS products utilize fiber, which adds substantial cost, up to 10x the cost of category or coax cable.

One of the biggest challenges with any DAS installation is establishing the signal source(s). Typically multiple network operators need to be included, which means multiple retransmission agreements/contracts, to support a maximum number of users, so it is not uncommon for an aDAS project to require 12 to 18 months before it even gets off the ground.

Passive DAS (pDAS)

The Hype: Passive DAS is the most cost-effective way to improve in-building cellular coverage.

The Reality: It has its limits and can cost you more than you think.

Passive DAS differs from active DAS in that it pulls its donor signal (the signal source) off-air or "over-the-air" (OTA) from the macro network. It requires less equipment, setup, and maintenance than aDAS. What's often not mentioned is that pDAS doesn't add any capacity to the macro network – a problem in environments with a large number of active users, and one reason network operators do not normally endorse pDAS.

Because of technology limitations, performance can vary from one operator to the next in the same system. This is due the technology's inability to manage different RF signal strengths effectively.

pDAS is an analog system in which cellular signals are distributed over coax cable and transmitted through regular antennas. Newer distribution methodologies that use category cable are substantially easier to work with and deploy, reducing costs and time-to-market.

Active DAS Hybrid (hDAS) or Smart Signal Booster

The Hype: It hasn't hit mainstream yet.

The Reality: It's a Carrier Grade Solution being used for the last decade with solutions ranging from Mobile to SMB to Middleprise.

Smart Signal Boosters are used in both plug & play environments and more IT centric installs using passive antenna elements. These are the highest-grade solutions available to this market, and function at up to 1000x dB more gain than the nearest competitor.

All-digital active DAS hybrid systems are increasingly being deployed to address the in-building cellular coverage demands of the middleprise market. These systems can be used in off-air mode or tethered to a small cell to achieve uniform coverage and capacity distribution, both at a far lower price than traditional DAS. New, multi-carrier all-digital active DAS hybrid solutions hit the market in 2020, and have added an entirely new dimension to affordable in-building cellular coverage for Enterprise.

What is Smart Cellular Coverage?

Award-winning Cel-Fi Products

Nextivity Inc., develops the award-winning Cel-Fi products that optimize cellular coverage in enterprise, business, residential, and transportation applications. Cel-Fi products are self-configuring, carrier-approved, and unconditionally network safe; leveraging the IntelliBoost chipset to deliver the industry's highest gain at the lowest cost per square foot. Cel-Fi is authorized by 200 carriers.



Best in Performance

Cel-Fi solutions are carrier-grade, and can perform at a level that is 1,000 times stronger.

Cel-Fi WAVE Portal

- Data modeling and reporting
- Cel-Fi device and asset management
- Mobile applications
- Globally trusted carrier-grade security
- Users can access the Cel-Fi WAVE portal through the dashboard interface.

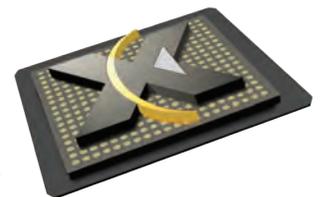


Network Safe

Self-organizing edge intelligence ensures that Cel-Fi does not interfere with other indoor wireless products such as Wi-Fi routers, Small Cells, and Distributed Antenna Systems (DAS). High speed Automatic Gain Control ensures that Cel-Fi is unconditionally network safe, and enables more simultaneous calls and higher data speeds.

IntelliBoost® Chipset

The Nextivity IntelliBoost® baseband processor is the first six-core processor designed specifically to optimize the indoor transmission and reception of 3G, 4G, and 5G wireless signals. With advanced equalization and echo-cancellation techniques, Nextivity has developed an architecture which delivers unprecedented in-building data rates and pervasive voice and data connectivity. The IntelliBoost processor ensures that Cel-Fi products never negatively impact the macro network while providing maximum coverage.



Ease of Setup

Cel-Fi solutions are designed to be the easiest solutions in their class to set up. Leverage Cel-Fi tools to set up and install, and the core technology that does the math for you.

The Cel-Fi Product Line for Individual Markets

The Most Advanced Technology for Improving Cellular Coverage

The Cel-Fi product line is the best solution available on the market today for addressing the universal challenge of poor cellular coverage in the office, at home, or on the road. Built for carriers, integrators, and IT professionals, Cel-Fi offers an exceptional coverage footprint and is carrier-approved for 3G/4G/LTE voice and data.

ENTERPRISE



Cel-Fi QUATRA 4000 / 4000i
Active DAS Hybrid



Cel-Fi QUATRA 2000 / 1000i
Active DAS Hybrid



Cel-Fi SOLO Stationary
Smart Signal Booster

INDUSTRIAL & REMOTE



Cel-Fi GO+ / GO X Stationary
Industrial Smart Signal Booster



Cel-Fi GO Stationary
Industrial Smart Signal Booster



Cel-Fi Antennas Indoor & Outdoor

HOME & SMALL BUSINESS



Cel-Fi PRO
Plug & Play Smart Signal Booster



Cel-Fi DUO / DUO+
Plug & Play Smart Signal Booster



Cel-Fi PRIME
1-2 Room Smart Signal Booster

PUBLIC SAFETY



Cel-Fi QUATRA RED
Public Safety ERRCS Solution



Cel-Fi GO RED
Portable Partner Kits



Cel-Fi GO RED
FirstNet Booster

MOBILE



Cel-Fi GO+ / GO X Stationary
Industrial Smart Signal Booster



Cel-Fi GO Stationary
Industrial Smart Signal Booster



Cel-Fi Mobile Antennas
RV, Trucker, Marine, & Vehicle

CEL-FI[™] QUATRA

All-Digital
Cellular
Solution



(Model No: G44)



(Model No: G34)

A Hybrid Active DAS that solves coverage issues for voice and data.



Performance
Leadership



Ease of
Install



Leaders
in Value



Fastest
Project Timeline



Carrier Grade
Approved

Cel-Fi QUATRA for Their Enterprise Needs

Spotty cellular coverage, poor voice quality, dropped calls, and dead zones continue to plague employees and visitors in middleprise buildings. Cel-Fi QUATRA is an Active DAS Hybrid that solves this problem. It is an affordable, all-digital solution. It provides uniform, high quality cellular signal throughout building, scalable to the size needed Cel-Fi QUATRA is carrier approved and guaranteed network safe. Unlike older analog boosters and passive DAS technology, Cel-Fi QUATRA delivers a cellular signal that is up to 1000x stronger, utilizing CAT 5e cabling for RF and Power over Ethernet, with no signal attenuation right to the perimeter of the building. Cel-Fi QUATRA can be installed in just days (compared to months typical of other solutions), and at a price point that meets the middleprise budget.



Highest Coverage Gain: Up 100 dB Max Gain



Dual Mode: Supercell or Off-Air Mode



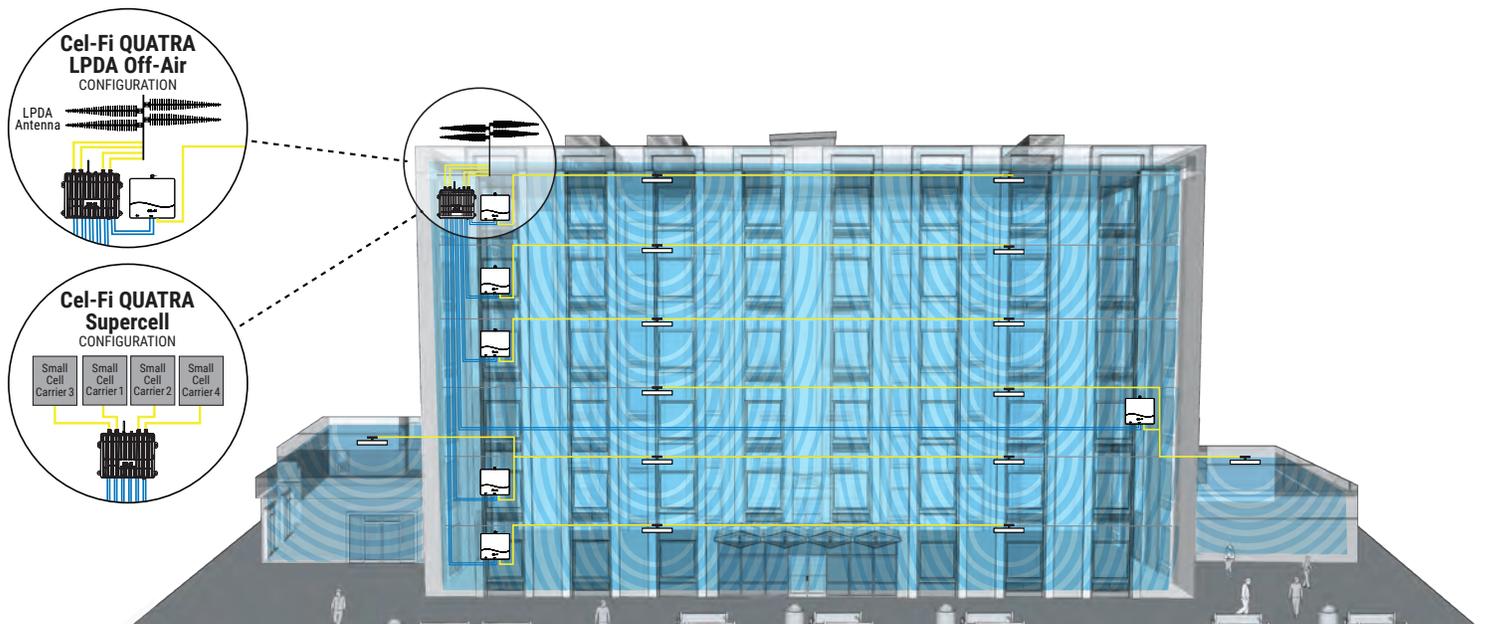
All Digital: Cat5e PoE / RFoE Solution



Scalable: Multi-Carrier
- 75,000 ft² per Network Unit



Network Safe: Carrier Approved





Which Cel-Fi QUATRA do you need for your building?

Off Air Configuration

Cel-Fi QUATRA can be installed off-air, using either a MIMO panel or omni donor antenna to provide high-quality in-building wireless connectivity. Cel-Fi QUATRA can be deployed by installers or IT personnel with Cat5e skills (no RF engineering skills needed). Cel-Fi QUATRA is a scalable solution that utilizes one or multiple NUs, depending on the environment and size of the space, with up to four distributed CUs connected to each NU.

Supercell Configuration

A Supercell is comprised of a Cel-Fi QUATRA system connected to a small cell. Multiple Cel-Fi QUATRA systems can be connected to a single small cell, or multiple small cells, to form a coordinated Supercell. A Supercell with Cel-Fi QUATRA is more efficient than multiple small cells, and the CUs of a Cel-Fi QUATRA system connected to a Supercell do not interfere with one another.

Passive DAS Components

When a building's layout could be better serviced by an array of focused, targeted antennas, Cel-Fi QUATRA can be deployed with passive DAS element. CUs can be deployed with up to 6 omni antenna remotes used to drive passive DAS branches. This deployment option is particularly well suited for environments with irregular shapes where the RF coverage needs to be shaped to match the building geometry.

Products:



Model Family	Carrier Support Capability	Scalable Coverage per Network Unit (up to Sq. Ft.)	Coverage Unit per Network Unit (up to Sq. Ft.)	Max Gain (up to dB)	Donor Source Options		Coverage Antenna Options (passive elements available)	All-Digital RFoE & PoE	Bands Supported
					Off-Air Mode	Supercell Mode			
Q4000i Part 90	Multi	75,000	6	100	Yes	Yes	Included Blade / External	Yes	2/4/5/12/13/25 /26/30/41/71
Q4000 Part 20	Multi	75,000	6	100	Yes	Yes	Included Blade / External	Yes	2/4/5/12/13/25
Q2000	Dual	50,000	4	100	Yes	No	Internal / External	Yes	2/4/5/12/13/25
Q1000	Single	50,000	4	100	Yes	Yes	Internal / External	Yes	2/4/5/12
									2/4/5/13
									1/3/8/20
									1/7/8/20
									1/3/7/8
									3/5/7/28



Accessories:



Cel-Fi Blade Antenna
(Included)



Cel-Fi QUATRA 1000 & 2000
Range Extender



Cel-Fi QUATRA 4000
Range Extender



Cel-Fi
Mount



Cel-Fi Wideband Omni
Donor Antenna



Cel-Fi COMPASS



Cel-Fi LPDA / LPDA-R (for QUATRA 4000)
High-Gain Antenna



Cel-Fi Directional Antenna



Cel-Fi MIMO Panel
Antenna



Cel-Fi Low-Profile
Antenna



Cel-Fi MIMO
Panel Antenna

INSTALL STAGES

Step 1:
Survey & Plan

Step 2:
Cable & Install (Use new or existing LAN)

Step 3:
Plug It In

Step 4:
Commission

CEL-FI SOLO

Smart Signal Booster

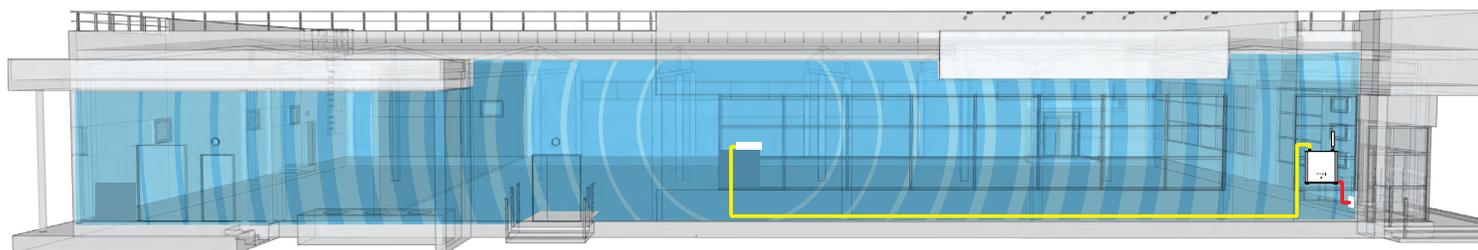


(Model No: H41)



Solving Cellular Problems for Small Enterprise & Large Residence

The Cel-Fi SOLO Smart Signal Booster is designed to solve cellular coverage problems for voice and data. Cel-Fi SOLO is an easy to install solution, that is based on the IntelliBoost® chipset. The award-winning architecture is known for being best in performance and unconditionally network safe. The Nextivity commitment is to protect the operator's network, deliver the best cellular performance, and be the easiest solution to install.



A Business and Residential Solution

Cel-Fi SOLO improves 3G/4G/LTE cellular service by eliminating dead zones and dropped calls. With up to 100dB of gain, it is the most powerful carrier grade solution available. The Cel-Fi SOLO covers up to 1,500 square meters of indoor space per system. Configure with included donor and server antennas, or expand options with outdoor or multiple server antennas. This business and residential solution is ideal for use in commercial properties, government buildings, small manufacturing, warehouses, offices, retail outlets, rural areas, and large homes.



Maximum Gain: Industry Leading 3G/4G/LTE
100dB Voice and Data



Best Performance: Smart Signal Booster with
IntelliBoost® Chipset Smart Technology



Cellular Coverage: Scalable Solution for up to
1500 m² per System



Ease of Setup: 15 Min Quick Install or Advanced Install with
Additional Antennas

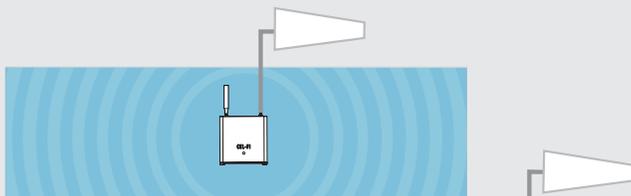


Cel-Fi WAVE: Setup and Management App



Network Safe: Carrier Approved

Quick Installation

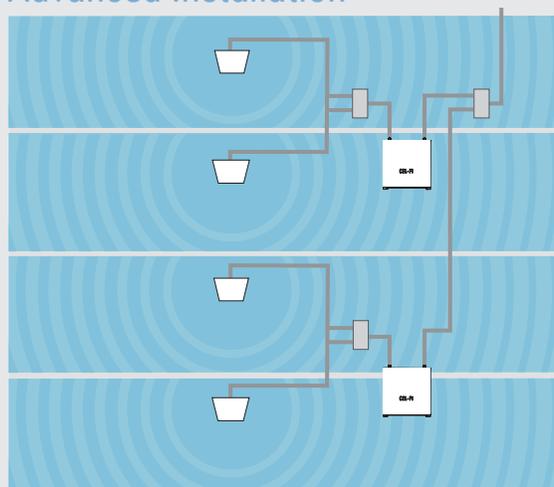


External Donor Antenna



Splitting Server Antenna

Advanced Installation



Multi-Unit

The Building Blocks

Cel-Fi WAVE Portal

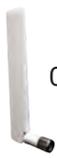
- Data modeling and reporting
- Mobile applications
- Cel-Fi device and asset management
- Globally trusted carrier-grade security
- Users can access the Cel-Fi WAVE portal through the dashboard interface

Network Safe

Self-organizing edge intelligence ensures that Cel-Fi SOLO does not interfere with other indoor wireless products such as Wi-Fi routers, Small Cells, and Distributed Antenna Systems (DAS). High speed Automatic Gain Control ensures that Cel-Fi SOLO are unconditionally network safe, and enables more simultaneous calls and higher data speeds.

IntelliBoost® Chipset

The Nextivity IntelliBoost baseband processor is the first six-core processor designed specifically to optimize the indoor transmission and reception of 3G/4G/LTE wireless signals. With advanced filtering, equalization and echo-cancellation techniques, Nextivity has developed an architecture which delivers unprecedented in-building data rates and pervasive 3G/4G/LTE connectivity. The IntelliBoost processor ensures that Cel-Fi products never negatively impact the macro network while providing maximum coverage.

ANTENNAS INCLUDED		ANTENNA OPTIONS				
						
Cel-Fi Whip	Cel-Fi Patch	Cel-Fi Indoor Omni Antenna	Cel-Fi Wideband Panel Antenna	Cel-Fi LPDA Antenna	Cel-Fi Omni Donor Antenna	Cel-Fi Wideband Directional Antenna
SETUP						
Step 1: Install Donor Antenna	Step 2: Install Server Antenna <i>(sold separately)</i>	Step 3: Place Cel-Fi SOLO	Step 4: Connect Donor & Server Antennas to the Cel-Fi SOLO	Step 5: Connect AC Power Source	Step 6: Activate & Setup with Cel-Fi WAVE	

CEL-FI GO

Smart Signal Booster



(Model No: G31)



(Model No: G32)



Improve Cellular Coverage in Mobile, In-building, Outdoors, and M2M applications.

Cel-Fi GO uses Nextivity's award-winning, network-safe technology to dramatically improve voice and data coverage in up to two bands for 3G, 4G, and LTE. The Cel-Fi GO Smart Signal Booster can produce up to 100dB of system gain in stationary mode and up to 65/70dB of gain in mobile mode. Cel-Fi GO is cost efficient and easy to deploy by an installer, and can be optimized and monitored by the Cel-Fi WAVE Platform. Cel-Fi GO is the first carrier-class NEMA 4 indoor / outdoor cellular coverage solution to feature industry leading system gain and Nextivity's unconditionally network safe guarantee. It is the highest-performing, most powerful and safest booster in it's class.

Donor Antenna – The donor antenna connects to the Cel-Fi GO (donor port) and captures the signal from the operator's macro tower. Use Cel-Fi WAVE to optimize the pointing of the antenna, to maximize gain and signal-to-noise ratio.

Server Antenna – The server antenna connects to the Cel-Fi GO (server port) and distributes the signal that is boosted and managed by the main unit. Splitters and combiners can be used to distribute to up to 6 remote server antennas per unit.

Indoor / Outdoor Rating – The Cel-Fi GO has a rugged design to withstand harsh conditions including dust and water exposure.

Change Modes and Carriers – Expand Capability and change operators with Cel-Fi WAVE. Change Mode by switching be-

tween Mobile Mode (65/70dB) and Stationary Mode (100dB).

Mobile Mode – For on the road or on board, built for Mobile Usage. This multi-carrier solution is ideal for trucks, vehicles, RVs, and boats.

Stationary Mode – For Buildings and Remote Places, built for Indoor / Outdoor tough to reach spaces. This multi-carrier 100dB solution is ideal for use in commercial properties, government buildings, agricultural settings, small manufacturing operations, rural areas, businesses, and large homes.

Donor Antenna – The donor antenna connects to the Cel-Fi GO (donor port) and captures the signal from the operator's macro tower. Use Cel-Fi WAVE to optimize the pointing of the antenna, to maximize gain and signal-to-noise ratio.



Maximum Gain: Industry Leading 3G/4G/LTE Voice and Data (65db Mobile/100 dB Stationary)



Best Performance: Smart Signal Booster with IntelliBoost® Chipset Smart Technology



Cellular Coverage: Multi-User Mobile or Stationary Modes for Buildings, Residential, Remote, Vehicle, Trucking, RV, and Marine for up to 15,000 ft² / 1400 m² per System



Ease of Setup: 15 Min Quick Install or Advanced Install with Additional Antennas



Cel-Fi WAVE: Setup and Management App



Weather Resistant: Indoor/Outdoor NEMA 4 / IP 66 Rated



Network Safe: Carrier Approved

SETUP

Step 1: Install Donor Antenna	Step 2: Install Server Antenna <i>(sold separately)</i>	Step 3: Mount Cel-Fi GO	Step 4: Connect Donor & Server Antennas to the Cel-Fi GO	Step 5: Connect an AC or 12V Power Source	Step 6: Activate & Setup with Cel-Fi WAVE
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CEL-FI™ GO+

Smart Booster Stationary Mode



(Model No: G31)



(Model No: G32)

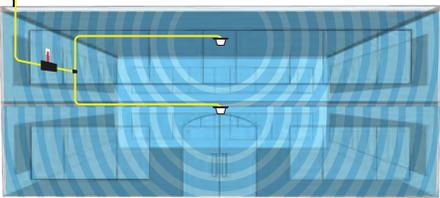
The Cel-Fi GO+ All-in-One Smart Signal Booster paired with Cel-Fi Antennas provide the best solution to optimize performance and streamline installation.



Cel-Fi GO+ X Indoor/Outdoor Solution is perfect for:

- government buildings
- agricultural settings
- parking garages
- IoT and M2M (machine to machine)
- small manufacturing operations
- business in single / multi-level commercial properties
- remote or rural locations
- large homes

Cel-Fi GO+ Smart Signal Booster can be installed indoors or outdoors for 100 dB signal gain in areas up to 15,000 square feet per system. The Cel-Fi GO+ Smart Signal Booster paired with either Cel-Fi Omni Dome Antenna(s) for ceiling mount or Cel-Fi Wideband Panel Antenna(s) for wall mount along with the Cel-Fi Wideband Directional Antenna is the perfect in-building, remote and IoT solution. Additional server antennas are available for venues with more floors or dense interior walls. For areas that suffer from extremely poor outdoor signal, the new high gain Cel-Fi LPDA Antenna is available.



Cel-Fi GO+ with two Cel-Fi Dome Antennas
Coverage Diagram

"By providing a single unit for mobile or fixed applications, Cel-Fi GO+ provides integrators with greater flexibility for a wide variety of applications, including in-building, remote, outdoor, and IoT. Customers can now have all of their coverage needs met by one solution, making it easier and more efficient to provide signal."

—Werner Sievers, CEO of Nextivity

	CEILING MOUNT OPTIONS		WALL MOUNT OPTIONS	
 G32-2/4/5/12/13M G32-1/3/5/7/8/20M	 Cel-Fi GO+ with 1 Cel-Fi Dome Antenna	 Cel-Fi GO+ with 2 Cel-Fi Dome Antennas	 Cel-Fi GO+ with 1 Cel-Fi Panel Antenna	 Cel-Fi GO+ with 2 Cel-Fi Panel Antennas
Donor Antenna	Cel-Fi Wideband Directional Antenna	Cel-Fi Wideband Directional Antenna	Cel-Fi Wideband Directional Antenna	Cel-Fi Wideband Directional Antenna
Alternate Donor Antenna Option	Cel-Fi LPDA Antenna	Cel-Fi LPDA Antenna	Cel-Fi LPDA Antenna	Cel-Fi LPDA Antenna
Server Antenna(s)	1 Cel-Fi Dome Antenna	2 Cel-Fi Dome Antennas	1 Cel-Fi Wideband Panel Antenna	2 Cel-Fi Wideband Panel Antennas
Coverage Area	Up to 10,000 ft ²	Up to 15,000 ft ²	Up to 10,000 ft ²	Up to 15,000 ft ²
Amplifier Gain	100 dB	100 dB	100 dB	100 dB
Max Downlink Power	16 dB (10 dBm per 5 MHz)	16 dB (10 dBm per 5 MHz)	16 dB (10 dBm per 5 MHz)	16 dB (10 dBm per 5 MHz)

CEL-FI GO+

Smart Booster Mobile Mode



(Model No: G31)



(Model No: G32)

For Vehicles, RVs, Trucks & Marine Vessels

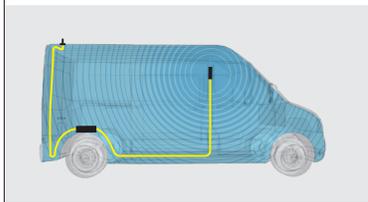
The Cel-Fi GO+ All-in-One Smart Signal Booster is the best solution for addressing the universal challenge of poor cellular coverage on the road. Select the appropriate donor/server antenna bundle for the application to deliver the best voice/data wireless performance for vehicles and boats on the move.

- 3G / 4G / LTE Voice and Data
- Multi-User Mobile Coverage
- Multi-Carrier Support with Carrier Switching
- Indoor / Outdoor NEMA 4 Rated
- Network Safe



Cel-Fi GO+ Vehicle

The Cel-Fi GO+ Vehicle solution includes the Cel-Fi GO+, Cel-Fi Mobile Donor Antenna, and the Cel-Fi Mobile Server Antenna. Easy carrier switching and mode switching is available through the Cel-Fi WAVE app. With an industry leading 70 dB gain, the The Cel-Fi GO+ Vehicle is an **ideal solution for vehicles on the road.**



A41-V21-100

Cel-Fi Mobile Donor Antenna:

- SMA-Male connector
- Omni-directional
- 3 m low loss high-performance cable
- Screw Mount version available



A41-V30-100

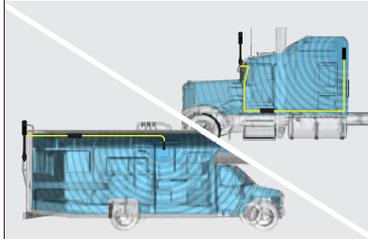
Cel-Fi Mobile Server Antenna:

- 4 m cable
- Adhesive mount for ease of installation
- SMA-Male connector
- Omni-directional antenna pattern



Cel-Fi GO+ RV/Trucker

Cel-Fi GO+ RV/Trucker Solution bundle includes the Cel-Fi GO+, Cel-Fi Trucker Antenna, and the Cel-Fi Mobile Server Antenna. Easy carrier switching and mode switching is available through the Cel-Fi WAVE app. With an industry leading 70 dB gain in mobile mode and 100 dB gain in stationary mode, Cel-Fi GO+ RV/Trucker is the **ideal solution for cross country trucking or remote RV stays.**



A21-V31-100

Cel-Fi Trucker Antenna:

- Heavy-duty spring base
- Mirror mount included for easy installation
- SMA-Male connector
- 4 dBi gain



A41-V30-100

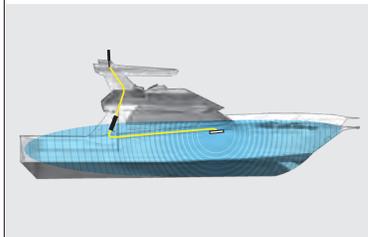
Cel-Fi Mobile Server Antenna:

- 4 m cable
- Adhesive mount for ease of installation
- SMA-Male connector
- Omni-directional antenna pattern



Cel-Fi GO+ Marine

The Cel-Fi GO+ Marine Solution includes the Cel-Fi GO+, Cel-Fi Marine Antenna and the Cel-Fi Mobile Server Antenna. Easy carrier switching and mode switching is available through the Cel-Fi WAVE app. With an industry leading 70 dB gain in mobile mode and 100 dB gain in stationary mode, the Cel-Fi GO+ Marine is an **ideal solution for nearshore or brown water recreational, ferrying or shipping vessels.**



A11-V37-100

Cel-Fi Marine Antenna:

- Weather resistant
- Built-in ground plane
- Threaded ferrule/post for side or bottom cable exit
- Screws onto standard 1 inch marine threaded mount



A41-V30-100

Cel-Fi Mobile Server Antenna:

- 4 m cable
- Adhesive mount for ease of installation
- SMA-Male connector
- Omni-directional antenna pattern

CEL-FI™ GO RMOE

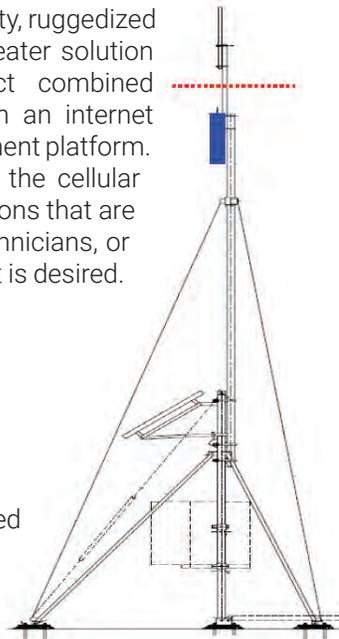
Remote Communication Solution



Ruggedized and Remotely Managed Cellular Repeater Solution

The Cel-Fi GO RMOE is a high reliability, ruggedized and remotely managed cellular repeater solution that leverages Cel-Fi GO product combined with a cellular modem to establish an internet connection to Cel-Fi WAVE management platform. The product is designed to extend the cellular network to remote and rugged locations that are not readily accessible to service technicians, or any area where remote management is desired.

- Monitor and Manage Devices Remotely
- Device Connectivity
- Interface Systems and Sites
- Carrier-Grade Security
- **Network Safe:** Carrier Approved
- **Weather Resistant:** Ruggedized NEMA 4 Rated



Omni Service Solution

Product Benefits

Remote Management: Users can access the Cel-Fi WAVE portal remotely through a web interface.

Performance Management: Easily control systems and ensure optimal performance.

Remote Troubleshooting: Troubleshoot and support systems remotely using real-time data and performance metrics.

Cel-Fi WAVE Portal: Cel-Fi WAVE remote device and asset management, enables data modeling and reporting, and globally trusted carrier-grade security.

Web-based Applications: Easy to connect to other web-based services for a fully integrated and remotely managed site solution.

Ease of Installation: Cel-Fi GO RMOE intelligently and automatically senses and adapts to its environment – including operator network changes, or those caused by other nearby Cel-Fi devices or boosters.

SETUP

Step 1: Install Product to Wall or Pole	Step 2: Mount Modem	Step 3: Connect Modem Antennas & Power to Modem	Step 4: Connect Antennas to Cel-Fi GO RMOE	Step 5: Connect 12V Power to Enclosure	Step 6: Validate Power, Repeater, and Connectivity	Step 7: Check Remote Management
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CEL-FI™ PRO/DUO+

Smart
Signal
Booster



Plug & Play Cellular Coverage Solutions: Home and Business

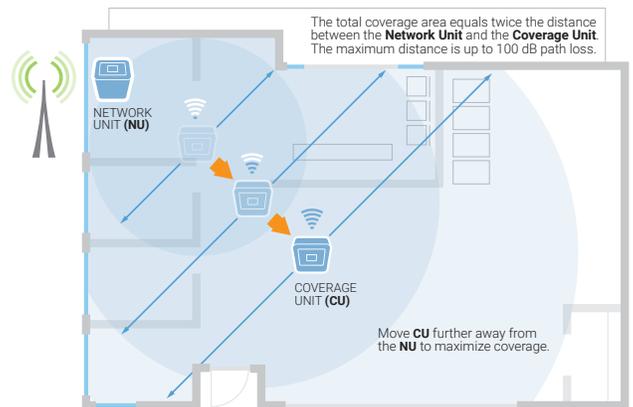
The Cel-Fi Smart Signal Boosters are designed to dramatically improve HD voice and data cellular coverage in indoor and outdoor applications. Cel-Fi's plug & play wireless products use Nextivity's award-winning, network-safe technology to improve 3G/4G/LTE cellular service, eliminate dead zones, and dropped calls. Cel-Fi will not only improve cellular coverage, it will also reduce your cell phone's power requirements and extend its battery life.

Ease of installation and power (up to 100 dB) are the key tenets to the Cel-Fi wireless products. These systems have

an exceptional coverage footprint from offices, warehouses, to residential applications. Cel-Fi products are cost efficient and easy to manage with the Cel-Fi WAVE Platform. It is the highest-performing, most powerful and safest booster in its class.

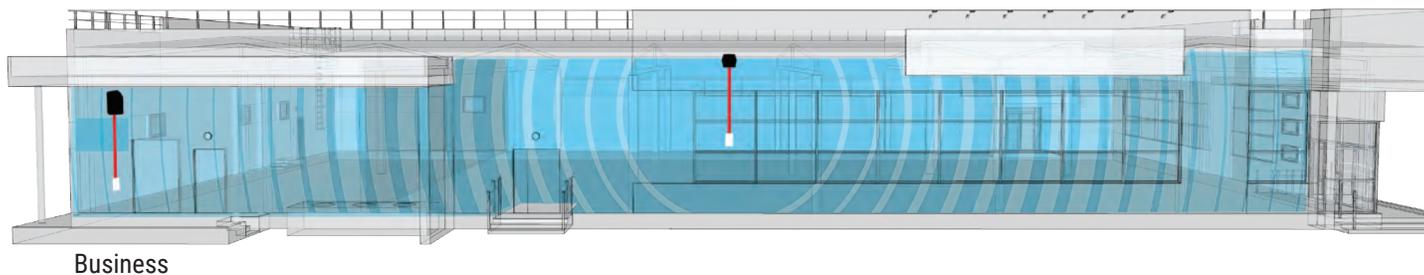
Cel-Fi PRO relays up to 100 dB in four bands for up to 15,000 sq. ft. per system (scalable), while Cel-Fi DUO+ relays up to 100 dB in two of the three bands. Both solutions leverage award winning wireless antenna technology.

-  **Maximum Gain:** Industry Leading 3G/4G/LTE Voice and Data
-  **Best Performance:** Smart Signal Booster with IntelliBoost® Chipset Smart Technology
-  **Cellular Coverage:** Business and Residential for up to 15,000 ft² / 1400 m² per System
-  **Ease of Setup:** Plug & Play
-  **Cel-Fi WAVE:** Setup and Management App
-  **Network Safe:** Carrier Approved

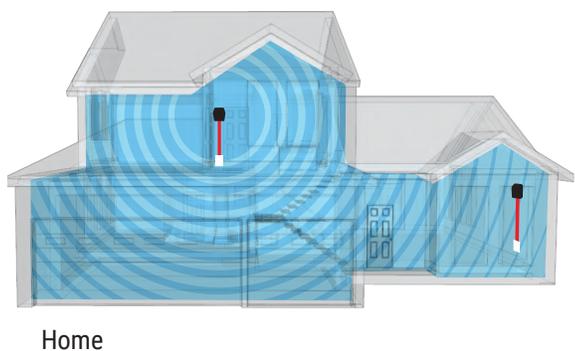


Cel-Fi PRO/DUO+ for Business and Residential Solutions:

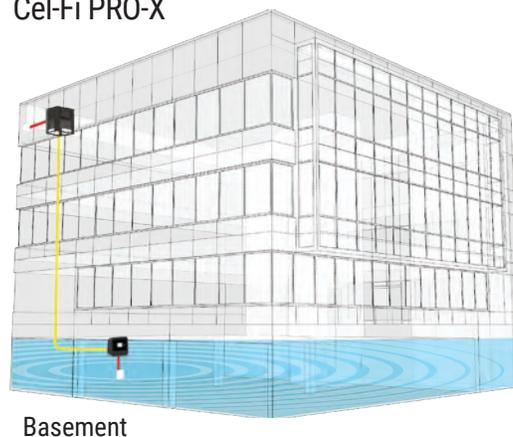
Cel-Fi PRO/DUO/DUO+



Cel-Fi PRO/DUO+



Cel-Fi PRO-X



Solving Cellular Service Problems

Cel-Fi PRO/DUO+ improves cellular service by eliminating dead zones and dropped calls. With up to 100dB of gain, it will improve cellular service and reduce your cell phone's power requirements to extend its battery life. The Cel-Fi PRO / DUO+ covers up to 15,000 sq. ft. of indoor space per system. It's fully self-contained and self-configuring, requiring no external antennas or wiring. Simply plug it in to boost indoor cellular coverage.

Maximize Coverage

Move Coverage Unit further away from the Network Unit to maximize coverage. The total coverage area equals twice the distance between the Network Unit and the Coverage Unit. The maximum distance is up to 100 dB path loss.

External Antenna Connection

Cel-Fi PRO EXA has an external antenna connection available. In environments where no inside cellular service exists, an approved external antenna can be attached.

Cel-Fi PRO X

Cel-Fi PRO X is a cable adapter sleeve that allows the Cel-Fi PRO unit to link across greater distances or through (RF blocking) obstacles. The accessory works with any Cel-Fi PRO, in locations where the standard wireless UNII system link is challenged. The Cel-Fi PRO X connects the Cel-Fi PRO Network Unit to the Cel-Fi PRO Coverage Unit using a completely passively coupled sleeve, which uses the cable for communications.

SETUP

Step 1:

Find the Best Cellular Signal

Use your phone to find the best cellular signal. Typically you will get the best signal near the window.

Step 2:

Place the Network Unit (NU)

Place the NU in the location where you get the best cellular signal.

Step 3:

Place the Coverage Unit (CU)

Place the CU in the location where you need improved coverage.

Step 4:

Use Cel-Fi WAVE to Optimize Setup

Using the Cel-Fi WAVE App, finish setup.

CEL-FI PRIME

Smart Signal Booster



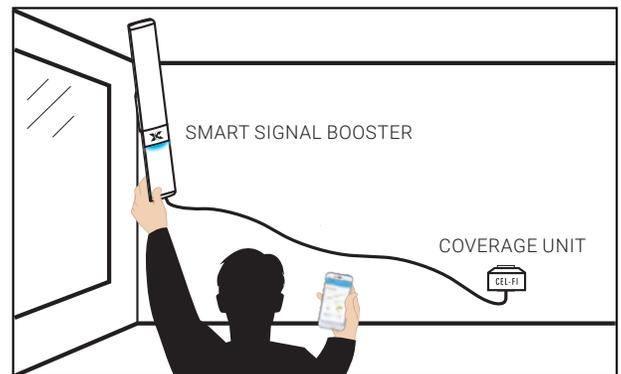
(Model No: S32)



Solving Cellular Problems for Small Spaces (1-2 Rooms)

Improve 3G and 4G LTE cellular service, eliminate dead zones, and dropped calls with Cel-Fi PRIME. With 80 dB of gain, Cel-Fi PRIME will not only improve cellular coverage, it will also reduce your cell phone's power requirements and extend its battery life. PRIME offers plug-and-play cellular coverage for a room, storefront, kiosk, apartment or similar space, enabling clear and reliable connections within the coverage area – approximately 1,000 ft² (100 m²). In an open space, the coverage bubble can be much larger.

Cel-Fi PRIME uses Nextivity's patented electrically steerable antenna technology, addressing pilot pollution issues, and ensuring PRIME outperforms the competition.



Maximum Gain: Industry Leading 3G/4G/LTE Voice and Data
(Up to 80dB)



Best Performance: Smart Signal Booster with IntelliBoost®
Chipset Smart Technology



Cellular Coverage: Business and Residential for up to 1/2 rooms
per System



Ease of Setup: Plug & Play



Cel-Fi WAVE: Setup and Management App



Network Safe: Carrier Approved

SETUP

<p>Step 1: Determine where coverage is needed</p>	<p>Step 2: Locate an open power outlet in the area where you need coverage</p>	<p>Step 3: Connect units with included cable before plugging into the wall.</p>	<p>Step 4: Find a location for the Smart Signal Booster to Mount System</p>
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CEL-FI™ GO RED

Smart FirstNet Booster



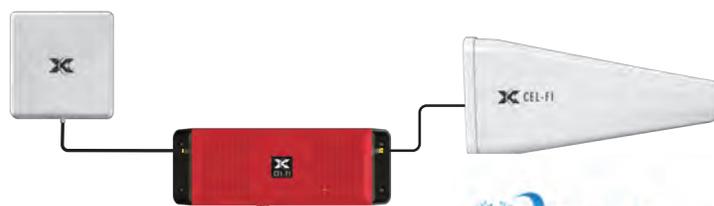
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When Communication is Life or Death



The Cel-Fi GO RED FirstNet Booster delivers cellular coverage in buildings for emergency communications for FirstNet subscribers. Cel-Fi GO RED coupled with Cel-Fi antennas is the best way to ensure FirstNet coverage in an emergency situation. Communication is not optional. In critical times, rely on equipment that ensures the best coverage.

- **FirstNet:** Boost FirstNet Bands 12 and 14
- **Maximum Gain:** Industry Leading 4G / LTE Voice and Data (up to 100dB)
- **Cellular Coverage:** up to 15,000 ft² Coverage per System Coverage
- **Network Safe:** Carrier Approved
- **Weather Resistant:** Indoor/Outdoor NEMA 4 Rated



IN-BUILDING SOLUTION



Buildings of 30,000 square feet and above may require Public Safety Equipment, across 8 million US buildings. Cel-Fi GO RED can work alongside existing equipment that works with legacy devices, so that FirstNet service is available at transition.



PORTABLE SOLUTION



Remote Communications Kits are a standard tool for Public Safety Equipment, as not all areas have good Cellular. Cel-Fi GO RED can be delivered as the core of a FirstNet portable communication solution.

CEL-FI™ QUATRA RED

In-building
Public
Safety



(Model No: F42-10S-100 & F42-10L-100)

Saving Lives. Built for
Integrators, AHJ's,
and Building Owners.

LAUNCHING
SOON

Performance
Leadership

Ease of
Install

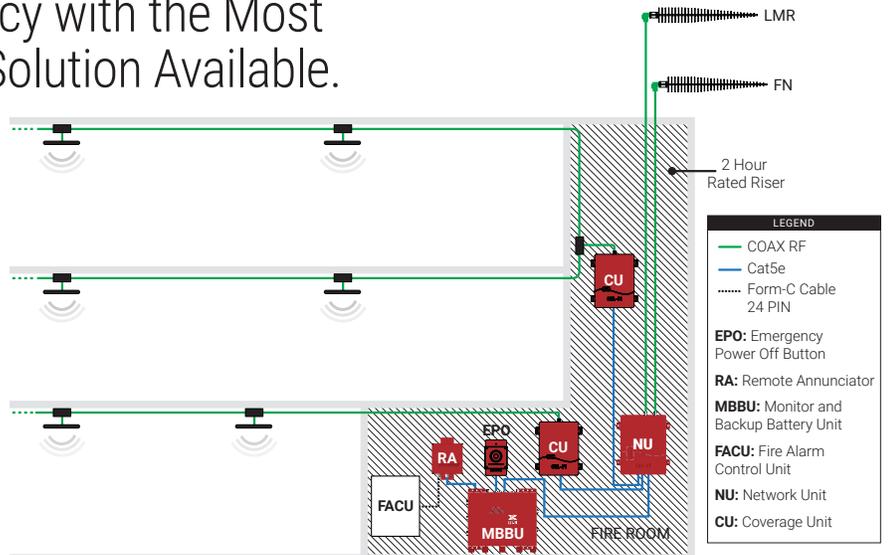
Leaders
in Value

Fastest
Project Timeline

Code
Compliant

Get a Faster Certificate Occupancy with the Most
Advanced Public Safety ERRCS Solution Available.

- Class A with 56 Channels
- 700/800 MHz for Public Safety with dedicated FirstNet
- Automatic Isolation
- Automatic Uplink / Downlink Calculation
- Talk-out Guarantee
- Scalable All-Digital PoE / RFoE
- Built-in Remote Monitoring



Scalable All-in-One Solution Elements:



Network Unit (NU): Supports 700/800 LMR + FirstNet bands 14, 4, 25 and 12. Connects to up to six CUs can be attached to a single NU. Dedicated donor ports for LMR and LTE.



Coverage Unit (CU): 1 watt output power for each LMR band. Class A device with 56 channels for both 700 & 800 bands. PoE ready. N type port to distribute RF signals.



Emergency Power Off: Shuts-off the radio system in case of risk of explosion or interference with the network.



Monitoring & Battery Backup Unit (MBBU): Supports 12hrs or 24hrs battery back up configurations. Front panel alarm, with LTE modem built-in. Two sizes for small and large configurations.



Remote Annunciator: Reports all alarms required by code. Normally open or close wiring options. Connects with MBBU via category cable.

**Code
Compliant**

- IFC 510
- NFPA 1221
- UL 2524



Solving coverage issues for voice, data, and public safety communications.



San Diego, CA based company, Nextivity builds and designs cellular coverage and public safety communication solutions. Cel-Fi products have been approved for use across 200 carriers and operators, in 100 countries. In many countries, Cel-Fi products are the only legal solution approved by the communications regulatory commissions. Not interfering with the network, and only improving upon it is the key.

Awards:



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