



Cel-Fi GO+ for cellular coverage on the move, in-building at challenged construction, and at remote locations

Network Safe

and endorsed

Carrier approved



Best in Performance 100x Stronger



Self-Organizing Intelligence No interference with other wireless products



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Lowest Total Product Cost Supports strong business case/ROI



Ease of Setup Time to market (TTM) reduction

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WAVE Software Portal

Remote management of devices

Cel-Fi GO+ Smart Signal Booster is the first multi-carrier cellular coverage solution to feature industry-leading 65 dB gain in mobile mode, delivering the best voice/data wireless performance for vehicles and boats on the move. When docked, parked, or anchored in stationary mode, Cel-Fi GO+ delivers 100 dB gain – which is up 1,000 times greater than other solutions on the market.

Cel-Fi GO+ addresses cellular coverage issues for all major carrier networks in the United States and Canada, including, AT&T, Verizon, T-Mobile,Sprint, U.S. Cellular, GCI Alaska, Rogers, TELUS, Bell Mobility, SaskTel, Freedom Mobile, Vidéotron, and Eastlink.. It has been proven in the field to resolve cellular reception problems, even where other solutions have failed. It is ideal for use in a parked RV or truck; at remote sites like off-shore drilling platforms, forestry logging camps, underground tunnels, or cellular relay stations across parkland acreage; and for virtually any type of construction site that requires better in-building cellular signal in spaces up to 50,000 square feet.

Following are a few examples of Cel-Fi GO deployments.

ON THE MOVE

MARINE

Tugboat



CHALLENGE: Tugboats used for towing and transportation on the Mississippi River had very weak cellular signals and poor connections in their 300 square-foot wheelhouses while at anchor or traveling along the river.

SOLUTION: Cel-Fi GO was installed in the tugboat wheelhouses, along with a high-performance, weather-resistant Cel-Fi Marine Antenna on the roof of the bridge, and a Cel-Fi Wideband Panel Antenna to distribute the signal. Because Cel-Fi GO is NEMA 4 rated it is protected from splashing water and a generally damp environment, and prevents damage from solid objects in windy conditions. Following the installation, there was strong cellular coverage throughout each of the tugboats.

FLEET

Travelling Palliative Care Nurses



CHALLENGE: Traveling nurse practitioners for Four Seasons Palliative Care in Western North Carolina needed better Verizon coverage in their vehicles to complete their notes and reports between visits.

SOLUTION: Verizon partners installed Cel-Fi GO in the first nurse practitioner's vehicle. After two days, the IT Director said GO is a "game-changer." Within two weeks, units for the rest of the fleet were ordered.

LAW ENFORCEMENT

Rural Patrol



CHALLENGE: Law enforcement officers patrol a 100-mile road in a rural and mountainous terrain, conducting vehicle searches and interviewing potential law violators. Because of the rugged terrain, the officers were unable to get the reliable cell phone signal they needed to relay their location and request backup to minimize safety risks.

SOLUTION: Cel-Fi GO was installed along with a directional Yagi Antenna in each patrol station to transmit the strongest possible cellular signal throughout the region. The patrol cars were also fitted with Cel-FI GO to expand the coverage range of each vehicle. After installation, patrol officers had several bars of signal, patrol areas no longer experienced coverage black outs, and vehicles maintained coverage more than 10 miles away.

IN-BUILDING

Military – Aerospace



CHALLENGE: A bunker used to monitor rocket testing and launches had little to no cellular signal outside and no signal whatsoever anywhere inside the 12,500 square-foot, two-floor space due to building materials. The bunker, located in close proximity to launch pads, is fortified with eight-foot thick concrete walls, six-inch plated steel doors, concrete floors, and 15-inch thick windowpanes.

SOLUTION: Cel-Fi GO was installed within four hours. Phones inside the bunker lit up with text messages and alerts as soon as the installation was completed. Occupants were very pleased with the results, making comments such as "Wow! I've never gotten messages or service in here."

Banking



CHALLENGE: Multiple branches of one of the largest banks in the country received constant complaints about poor cellular coverage. Like many banking organizations, branch operations are housed in buildings with thick concrete walls that prevent cellular signals from coming inside. In many cases, the layout and building materials not only lead to dropped calls, but data gateways are also unable to connect to modems. The IT Director tested femtocells and repeaters, but they were not consistent enough or effective for wireless applications, such as signage.

SOLUTION: Several sites tested the Cel-Fi Smart Signal Boosters family of products to accommodate the various buildings, branch sizes, and carriers in the region. Cel-Fi GO was installed in certain locations for use inside or outside buildings. Each system was deployed in less than an hour, resulting in strong, stable cellular signals that resolved all coverage challenges. Cel-Fi Smart Signal Boosters were then rolled out to the bank's 25,000 branches.

REMOTE LOCATIONS

AGRIBUSINESS

Rural Farm



CHALLENGE: Walking Woods Farm, located in rural Texas, wanted exterior AT&T cellular coverage by its barns and front porch, as well as inside its buildings. The AT&T service in the remote area was poor, with ground-level signal on the porch either at one or no bars with RSRP – 119dB.

SOLUTION: Cel-Fi GO was installed with a Ventev 698-2700 MHz Directional Antenna (as the donor and server antennas) on a 33-foot mobile antenna mast. Cel-Fi GO's LTE signal could be accessed at the farm starting at 20-feet above ground level. Once installed, Cel-Fi GO was able to broadcast RSRP -88 0dB signal 50 to 75 feet from the antenna location to the desired coverage areas. The job was completed within hours and videos could be streamed by people sitting on the porch.

COMMERCE

Logging Camp



CHALLENGE: In the Great Lakes area, a remote logging operation lacked communication for its remote office, camps, and workers in machinery. The poor cellular coverage in the logging camps prohibited device and router use, both of which are instrumental for employee safety.

SOLUTION: A total of 15 Cel-Fi GO systems were installed: 10 in stationary mode at work sites, and five in mobile mode in heavy trucks that travel from the site to processing facilities. Together with high-gain trucker antennas, the system's NEMA 4 rating made Cel-Fi GO ideal for vehicles operating in this remote, rugged environment, while resolving connectivity issues.

Parklands and Wilderness



CHALLENGE: The Ningaloo Lighthouse Caravan Park had no cellular signal except for one bar in the cabins situated on top of the ridge line. To encourage bookings, it was important for campers to have mobile coverage. It was also essential to provide 4G coverage for retired travelers staying at the park so they could manage daily living activities while on the road, such as paying bills.

SOLUTION: Cel-Fi GO systems were placed at the four corners of the park, with 8dBi Dual Polarized MARS Antennas mounted at the top of the hill and pointed down toward the site. According to Greg Fletcher, Sales & Engineering Manager, "The data screamed in and while I knew the Cel-Fi GO and antennas were good and the solution would work, the end result coverage was even better than expected."

RMAC for Remote Substations



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CHALLENGE: A remote power substation in Oklahoma City lacked sufficient cellular signal to support Remote Monitoring and Control (RMAC), making it vulnerable to unauthorized access and damage. With a Verizon tower more than 10 miles away, the substation required connectivity to protect its critical infrastructure.

SOLUTION: Thanks to its NEMA 4 rating, Cel-Fi GO was connected outdoors to a Mount Directional Antenna that was attached to a pole and pointed at the cell tower. This amplified the signal sufficiently, enabling RMAC and improving security.

Construction Site Security



CHALLENGE: An Atlanta-based digital surveillance and security company worked on a dam restoration project located in a remote part of the county at the edge of the network. The site housed up to \$6 million-worth of equipment. However, the site had insufficient cellular signal to support the surveillance gear.

SOLUTION: Using Cel-Fi GO, the cellular coverage was enhanced and they were able to employ real-time digital monitoring capabilities to protect the construction materials, equipment, and assets on the job site, with the additional benefit of creating coverage for the workers and their gear. Cel-Fi GO created a coverage bubble for the Digi industrial switch and the 4G Sierra Wireless Ruggedized router, resulting in real-time video capturing and monitoring. Not only did this minimize risk to the equipment, it also provided 9-1-1 capabilities to help mitigate safety and compliance concerns. Now, the customer is able to make decisions quickly based on real-time video footage.

VENDING MACHINES

Soft Drink Manufacturer



CHALLENGE: A major soft drink manufacturer deployed new cellular IoT-based vending equipment that communicated current inventory levels to route managers, along with information on whether the equipment was operating correctly. The system was designed with cellular-based routers, but when deployed, the lack of in-building coverage limited national deployment.

SOLUTION: Cel-Fi GO was deployed to bring coverage to the vending machine, with the added benefit of improving reception for employees in the cafeteria. "These are the type of innovative IoT cellular solutions that Cel-Fi products have enabled. Operators are often desperate for a carrier-grade solution, and we have been happy to help," says Nextivity Solution Architect, David Baeza.

