



Cel-Fi GO uses Cel-Fi's award-winning network safe Smart Booster technology to improve voice and data cellular performance in a variety of mobile and indoor environments.

System Features

- **Smart Signal Booster™**
- Clean and compact industrial design
- Two Versions available
 - Stationary: includes AC Power Supply
 - Mobile: includes 12V CLA-style Supply
- LED User Indicators for Mode and Status
- IP-54 rated for use in harsh conditions
- Cel-Fi GO is a cabled solution using an outside Donor antenna and an inside Service antenna
- Selectable modes: WCDMA/LTE/AUTOMATIC
- Simple, built-in, self-test
- Unlocked: Cell phones do not need to be registered with Cel-Fi to benefit
- Support for Nextivity WAVE mobile & desktop application
- Remote software update capability
- End-to-end cellular communication encryption without additional risk of vulnerability
- Rigid cast-aluminum casing with integrated mounting holes
- Conduction cooling

Wireless Features

- Supports voice and data services: WCDMA/HSPA+/LTE (FDD).
- System Gain:
 - Stationary Unit: Up to 100dB
 - Mobile Unit: Up to 70dB
- Max TX power: 16 dBm downlink and 22 dBm uplink, per band
- Bluetooth Low-Energy (BTLE) communications with smartphones for connection to the WAVE app
- Automatic Gain Control (AGC) based on fast real-time echo-cancellation
- Advanced digital echo-cancellation (>30dB) and channel select filtering algorithms

- Cel-Fi actively manages the cellular link between the cell tower and user devices
- Extremely linear RF front end
- Adaptive signal equalization
- Based on Nextivity's 3rd-generation (ARES) chipset

Mobile Network and Network Protection Features

- **Unconditionally network safe**
- Will relay E-UTRA any of bands 3, 5, and 28 (one band at a time)
- Cel-Fi supports multiple cellular channels with bandwidths from 5 to 20 MHz
- Total system relay bandwidth of 20 MHz
- Support for 3GPP Rel. 10 features
- Seamless integration with the Macro networks
- Provider-specific booster: Cel-Fi boosts service only for the Operator PLMNIDs the device is authorized and configured for
- Software-managed system intelligence prevents uplink system gain from exceeding path loss, eliminating 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 by Operator's network command or failure detection
- User/System Registration options available, to help MNOs understand booster deployments

System Benefits

- **Stationary or Mobile (Nomadic) cellular coverage**
- May be used in any number of conventional installation scenarios, or to replace outdated or illegal repeaters
- Single button control allows user to select WCDMA(3G), LTE(4G) or AUTOMATIC to let GO relay the best available technology
- Ability to learn and adapt to changing network channels or network reformatting
- No ongoing maintenance needed, nor reliance upon Internet, GPS, or handsets to be configured on the system
- Software Updates and technical support, with the WAVE app
- Any subscriber device from the configured Operator will benefit from improved coverage

- Cellular communications remain encrypted and secure
- Multiple systems can be deployed without complicated installations or concern for mutual interference
- User Interface (UI) LEDs provide visual feedback for ease of setup
- Easy to mount
- Silent operation

Wireless Benefits

- Automatically adapts to fit area to be covered, from small vehicles to large homes or offices up to 1200 square meters (13,000 square feet), or more for open spaces
- The highest performance, fully-certified, signal booster possible in the power class
- Real-time adapting capability ensures the best possible user experience, in actual user environments, which are constantly changing, with a variety of signals present
- Bluetooth LE enables the system to communicate with smartphones and the Cel-Fi WAVE mobile app, improving the user experience and adding capability to the product
- The Linearity of Nextivity's high-performance precision-calibrated RF front end virtually eliminates Intermodulation Desense (IMD) issues
- Maximizes signal-to-noise (SNR) ratio - provides better data rates without negatively impacting macro cells
- Allows for 30dB more gain than traditional boosters
- Cel-Fi remains fully functional, even when there are other RF emitters present

Mobile Network and Network Protection Benefits

- Supports most network configurations of LTE and UMTS/WCDMA
- Reduce returns, customer care calls, and provide the best product experience to users
- Unlike wideband amplifiers, ensure the equipment capex benefits only your network – third-party macro cells are completely unaffected by Cel-Fi GO
- Network operators can be assured Cel-Fi devices are being used as intended, with registration and location lock options available
- Completely network safe, doesn't degrade macro capacity
- Ultimate control of the devices in the field resides with the network operator
- Registration options allow control over device deployment and may be used to prevent unauthorized use

RF Specification

RF Specification	Band Specific Radio		
	Band 3	Band 5	Band 28
Frequency DL	1805-1880 MHz	869-894 MHz	758-788 MHz
Frequency UL	1710-1785 MHz	824-849 MHz	703-733MHz
Duplex Distance	95 MHz	45 MHz	55 MHz
Maximum Relay BW	20 MHz	15 MHz	20 MHz
UL TX Power Max Conducted	22 dBm	20 dBm	20 dBm
DL TX Power Max Conducted	10 dBm per 5 MHz (16 dBm max)	10 dBm per 5 MHz (15 dBm max)	10 dBm per 5 MHz (16 dBm max)

*Specifications subject to change. Contact enquiry@rfi.com.au for more information.

Versions Available

- Mobile: GO unit + 12V CLA adapter
- Stationary: GO unit + AC adapter

Power

- 9.6 to 28.8 VDC via external supply
- External supply: 100 to 240 VAC, 47 – 63Hz
- Power consumption less than 15W per unit*

Antenna Requirements

- 50ohm antenna matching
- Antenna cables require SMA-Male connectors
- VSWR <2:1
- Antennas should support appropriate device band frequencies

Environmental

- Ambient operating temperature: 0° to 65°C
- Storage temperature: -25° to 65°C
- Relative humidity: 0% to 95%, noncondensing
- RoHS II 2011/65/EU
- WEEE (2002/96/EC)
- ErP 2009/125/EC

Physical Specifications

255mm(W) x 87mm(D) x 28mm(H)*
 600g*
 SMA Female Donor Antenna Connector (50 ohm)
 SMA Female Service Antenna Connector (50 ohm)
 IP54 Rated

Standards*

R&TTE 1999/5/EC	EN 60950-1:2006+A11/A12/A1/A2
R&TTE 1999/519/EC	RCM Mark
EN 301 489-17, 23	CE Mark
EN 301 908-1, 11, 15	CISPR 25
EN 300-328	ISO 763702
EN 62311	3GPP TS 25.143 Rel.10
Bluetooth BQB	3GPP TS 36.143 Rel.10



Note: Certifications are regional; not all products need or have the same certifications. Please check the specific model number to determine exactly which certifications it has.

Patents & Design

This product is covered by Nextivity, Inc., patents and patents pending. Designed by Nextivity, Inc., in San Diego, California, USA Please refer to cel-fi.com for details.