

CEL-FI GO X

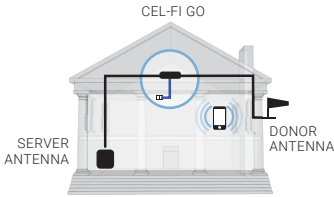
Cellular / LTE

Smart Signal Booster™



DATA SHEET

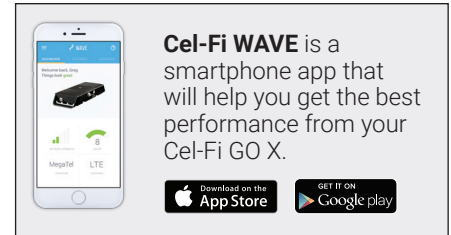
MODEL NUMBERS:
G32-2/4/5/12/13X
G32-1/3/5/7/8/20X



Cel-Fi GO X uses Nextivity's award-winning, network-safe Cel-Fi Smart Signal Booster technology to dramatically improve voice and data coverage in up to two (2) bands for 3G, 4G, and LTE. It is designed to improve indoor and outdoor cellular coverage when one bar is available outdoors, by allowing an antenna to be used to improve indoor cellular performance. Cel-Fi GO X is cost efficient and easy-to-deploy by an installer, and can be easily optimized and monitored by the Cel-Fi WAVE platform.

Benefits:

- **Superior Performance: 100dB Max Gain**
- **NEMA 4 Rated**
- **Multi-carrier Support with Carrier Switching app**
- **Carrier Approved for 3G/4G/LTE for Voice and Data**
- **Unconditionally Network Safe**
- **SMA Antenna Connectors**
- **Cel-Fi WAVE Management Platform**



Cel-Fi WAVE is a smartphone app that will help you get the best performance from your Cel-Fi GO X.



Wireless Features

3G/4G/LTE support (WCDMA / HSPA+ / LTE)
Supports two (2) bands simultaneously from a single operator
FDD
Up to 100dB system gain, per band
Peaceful coexistence with adjacent Wi-Fi (2.4 GHz & 5 GHz), femtocells, and cellular devices
Advanced digital echo-cancellation (>30dB) and channel select filtering algorithms
Automatic Gain Control (AGC) based on fast real-time echo-cancellation
Linear RF front end
Adaptive signal equalization
Uses Nextivity's 3rd-generation "ARES" chipset

System Features

SMA connectors for Donor and Server antennas
NEMA 4 rated enclosure and connectors
Support for BIAS-TEE power through Server port
Glanceable LED User Interface (UI)
Supporting smart phone application (Cel-Fi WAVE)
Convection cooled cast aluminum chassis
Easy mounting capability
Mounting screws and anchors included

Mobile Network and Network Protection Features

Global band combinations available
Systems are pre-configured for a single carrier (network operator)
Supports multiple channels with bandwidths of 5/10/15/20 MHz per channel
Works with any user equipment (UE) on the configured network (no whitelist/blacklist)
Up to 40 MHz system relay bandwidth
Support for 3GPP Release 10 features
Provider-specific system: Cel-Fi distributes and boosts service only for the Operator PLMNIDs for which the device is authorized and configured
Secure and ciphered provisioning
System intelligence accurately establishes proper safe uplink power in real time
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

Wireless Benefits

Clear and reliable cellular connections within coverage area up to 15,000 ft² (1,400 m²) per system
Highest gain (100dB) provides best coverage footprint
Advanced Echo-Cancellation allows Cel-Fi to transmit more power without feedback interference
Subscriber devices (UE) require less transmit power for improved battery life
Linearity eliminates IMD desense issues
Dynamic gain control ensures maximum gain — best coverage — at all times in ever changing RF environments, without user intervention
Nextivity purpose-built, high-performance, six core ASIC processor, provides best performance at lowest cost

System Benefits

Distribute and boost cellular coverage
3G and 4G support, Voice and Data, network safe
LED cues provide visual feedback for ease of setup and status
Works with any subscriber device from the configured Operator

Mobile Network Benefits

Flexibly deploy on LTE, VoLTE, LTE-Advanced, and WCDMA networks, with multiple cellular bands, simultaneously
Automatically adjusts channel bandwidths between 5 MHz and 20 MHz
UE control is transparent and remains centralized in the network core (no gateways or third-party software)

Compliance

(check individual product version for specific regional compliance)

3GPP TS 25.143 Rel.10
3GPP TS 36.143 Rel.10
FCC Part 15, 20, 22, 24, 27
ISED (Industrie Canada)
Bluetooth BQB
CE

System Management

(Software)

Supported by Cel-Fi WAVE cloud portal
Cel-Fi WAVE Portal capability: Status (List and Map) Commissioning Diagnostics Software Updates
Settings Reporting Alarms & Notifications

Antenna Ports

(Donor and Server)

Model: G32-1/3/5/7/8/20: 791–2690 MHz
Model: G32-2/4/5/12/13: 699–2180 MHz
Impedance: 50 Ohm
Return Loss: 8 dB
Output Protection

Environmental

Operating temperature: 0° to 65° C
Convection Cooling
Relative humidity: 0% to 95%, noncondensing
RoHS 2 (European and China compliant)
WEEE
NEMA 4
Surface Temp at any point (30° ambient): 53° C

Dimensions

Height	Width	Length	Weight
43.5 mm	96.5 mm	272.5 mm	850 g

Power

9.6 – 16.5V
2A current draw
16W nominal power consumption

Installation

Mounting hardware included

DC Power Plug and Jack

NEMA 4 rated power plugs and jack



Radio Performance

The Cel-Fi GO system can boost up to two (2) bands concurrently. Either profile can be selected:
A) One (1) High band boost and one (1) low band boost or B) Two (2) high bands boost

Band Variations:

(check product version for specific band support)

Model Number	G32-2/4/5/12/13X		G32-1/3/5/7/8/20X
Bands Supported	2, 4, 5, 12, 13		1, 3, 5, 7, 8, 20
Band	Downlink	Uplink	MHz
1	2110-2170 MHz	1920-1980 MHz	Up to 20 MHz contiguous boost, HSPA or LTE
2	1930-1990 MHz	1850-1910 MHz	Up to 20 MHz contiguous boost, HSPA or LTE
3	1805-1880 MHz	1710-1785 MHz	Up to 20 MHz contiguous boost, HSPA or LTE
4	2110-2155 MHz	1710-1755 MHz	Up to 20 MHz contiguous boost, HSPA or LTE
5	869-894 MHz	824-849 MHz	Up to 15 MHz contiguous boost, HSPA or LTE
7	2620-2690 MHz	2500-2570 MHz	Up to 20 MHz contiguous boost, LTE
8	925-960 MHz	880-915 MHz	Up to 15 MHz contiguous boost
12	729-746 MHz	699-716 MHz	Up to 10 MHz contiguous boost, LTE
13	746-756 MHz	777-787 MHz	Up to 10 MHz contiguous boost, LTE
20	791-821 MHz	832-862 MHz	Up to 20 MHz contiguous boost, LTE

Maximum DL in-band donor level -40dBm
Maximum UL power 22dBm bands 1, 2, 3, 4, 7, 8
Maximum UL power 20dBm bands 5, 12, 13, 20
Maximum DL power 10dBm per 5 MHz bands 1, 2, 3, 4, 7, 8
Maximum DL power 10dBm per 5 MHz bands 5, 12, 13, 20
LTE 5/10/15/20 MHz and WCDMA 5 MHz bandwidths