DATA SHEET

CEL-FI GO X | Cellular / LTE

Smart Signal Booster

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.

Download on the App Store | GET IT ON Google play

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 (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 12,500 ft^2 (1000 m^2) per system
- Highest gain (100 dB) provides best coverage footprint
- Advanced Echo-Cancelation 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 5MHz and 20MHz
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 (Industre Canada)
Bluetooth SIG
CE

System Management
(Software)

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

Antenna Ports
(Donor and Server)

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
43.2 mm	96.5 mm	272.5 mm	600 kg

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 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 20MHz contiguous boost, HSPA or LTE
2	1930-1990 MHz	1850-1910 MHz	Up to 20MHz contiguous boost, HSPA or LTE
3	1805-1880 MHz	1710-1785 MHz	Up to 20MHz contiguous boost, HSPA or LTE
4	2110-2155 MHz	1710-1755 MHz	Up to 20MHz contiguous boost, HSPA or LTE
5	869-894MHz	824-849 MHz	Up to 15MHz contiguous boost, HSPA or LTE
7	2620-2690MHz	2500-2570 MHz	Up to 20MHz contiguous boost, LTE
8	925-960 MHz	880-915 MHz	Up to 15MHz contiguous boost
12	729-746 MHz	699-716 MHz	Up to 10MHz contiguous boost, LTE
13	746-756 MHz	777-787 MHz	Up to 10MHz contiguous boost, LTE
20	791-821 MHz	832-862 MHz	Up to 20MHz contiguous boost, LTE

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

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