CEL-FI GO X | Smart Signal Booster 3G / 4G / 5G

DATA SHEET

Smart Mobile Coverage, Clearly Better

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 / 5G. It is designed to improve indoor mobile coverage when one bar is available outdoors, by allowing an antenna to be used to improve indoor mobile performance. Cel-Fi GO X is cost efficient and easy-to-deploy by an installer, and can be easily optimised and monitored by the Cel-Fi WAVE platform.

Features

- **Superior Performance: 100dB Max Gain**
- **IP65 rated, Weather Resistant**
- **Multi-carrier Support with Network Switching app**
- **3G / 4G / 5G for Voice Calls and Data Connections**
- **Carrier Approved, Unconditionally Network Safe**
- **SMA Female 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.

App Store | Google play

Wireless Features	3G / 4G / 5G 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 mobile 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 equalisation
	Uses Nextivity's 3rd-generation "ARES" chipset
System Features	SMA Female connectors for Donor and Server antennas
	IP65 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 authorised and configured
	Secure and ciphered provisioning
	System intelligence accurately establishes proper safe uplink power in real time
	Uplink Muting Mode automatically shuts down uplink mobile transmissions when no active user equipment is detected
	System shuts down upon Operator's network command or failure detection
Wireless Benefits	Clear and reliable mobile connections within coverage area up to 15,000 ft2 (1,400 m2) per system
	Highest gain (100dB) 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, user intervention
	Nextivity purpose-built, high-performance, six core ASIC processor, provides best performance at lowest cost
System Benefits	Distribute and boost mobile signal coverage
	3G / 4G / 5G support, Voice and Data, network safe

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Mobile Network Benefits

LED cues provide visual feedback for ease of setup and status

Works with any subscriber device from the configured Operator

Flexibly deploy on LTE, VoLTE, LTE-Advanced, and WCDMA networks, with multiple mobile bands, simultaneously

Automatically adjusts channel bandwidths between 5 MHz and 20 MHz

UE control is transparent and remains centralised in the network core (no gateways or third-party software)

Compliance

Licence-exempt and fully comply with Ofcom's UK Interface requirement 2102 (IR2102) (UK) and ComReg S.I.No.283 of 2018 (Ireland)

System Management

(Software)

Supported by Cel-Fi WAVE cloud portal

Cel-Fi WAVE Portal capability:

• Status (list and map) • Settings

• Commissioning • Reporting

• Diagnostics • Alarms & Notifications

• Software Updates

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: 8dB

Output Protection

Environmental

Operating temperature: 0° to 65° C

Convection Cooling

Relative humidity: 0% to 95%, noncondensing

RoHS 2 (European and China compliant)

WEEE

IP65

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

IP65 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

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

Ofcom Licence Exempt

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