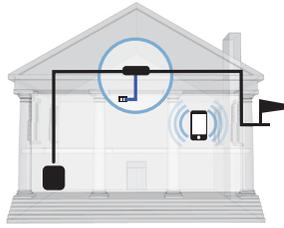


## Basic Functionality

The Cel-Fi GO X connects to an external Donor Antenna to draw in a mobile signal from the macro network. The Cel-Fi GO X Smart Signal Booster finds the appropriate mobile signal, per the product's configuration, improves the signal, and amplifies it. Improved service is provided to the user via the Server Antenna.



NOTE: A Mobile version ("GO M") of the product is available. Go to [cel-fi.com](http://cel-fi.com) for details.

## Cel-Fi WAVE Mobile App

The Cel-Fi WAVE app provides a User Interface to Cel-Fi systems. The app's dashboard shows the system "Boost" value. A numeric representation mapped to the amount of Signal Gain the system is providing. Higher is better, with nine (9) being the highest value.

## Cel-Fi WAVE and Cel-Fi GO X

Your Cel-Fi GO X will automatically select the strongest mobile signal to boost. However, you may manually configure the system preferences using Cel-Fi WAVE. Connect to Cel-Fi GO X with a bluetooth enabled mobile device, and manage the boost settings.

## IP65 Rated

The Cel-Fi GO X is IP65 rated, and can be used both indoors and outdoors.

The IP65 rating provides the following advantages:

- A degree of protection against ingress of solid foreign objects (falling dirt and windblown dust)
- A degree of protection from the ingress of water (rain, sleet, snow, splashing water, and hose directed water)
- Equipment will be undamaged by the external formation of ice on the enclosure

## User Interface

Cel-Fi GO X features an LED on the top face to indicate the unit's state:

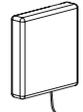
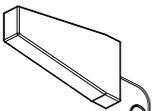
LED	MEANING
Solid Green	The unit is working properly and boosting properly.
Blinking Green	Unit is scanning for networks to boost.
Blinking RED	The unit is in an error condition. Use the Cel-Fi WAVE app to check the error code meaning and remedy.
Solid RED	The unit has a hardware error and is not booting up normally.

## Troubleshooting

ISSUE	MEANING	ACTION
Continual Blinking GREEN	Unit is operational, but not attaching to a network to boost.	<ul style="list-style-type: none"> <li>• Make sure both antennas are connected properly and are appropriate for the desired frequencies to boost.</li> <li>• Make sure the selected operator to relay is available at your location. This can be checked with the Cel-Fi WAVE application. If the service is not available, it cannot be boosted.</li> </ul>
Solid RED LED	Unit is not operational.	<ul style="list-style-type: none"> <li>• Unplug and reinsert power.</li> <li>• If restart has no effect, contact vendor for remedy.</li> </ul>

## Antenna Kitting

The following antennas are authorised to be used with Cel-Fi GO X Smart Signal Booster:

MODEL	DESCRIPTION	FREQUENCY
 <b>A32-V32-100</b>	Wideband Panel Antenna	698-960 // 1710-2700 MHz
	<b>CERTIFICATION</b>	<b>BAND SUPPORT</b>
	FCC, CE	1/3/5/7/8/20/2/4/5/12/13/28
	<b>DONOR</b>	<b>SERVER</b>
✓	✓	
 <b>A32-V24-100</b>	Wideband Directional Antenna	698-960 // 1710-2700 MHz
	<b>CERTIFICATION</b>	<b>BAND SUPPORT</b>
	FCC, CE	1/3/5/7/8/20/2/4/5/12/13/28
	<b>DONOR</b>	<b>SERVER</b>
✓	✓	
 <b>A21-V33-100</b>	Whip Antenna	698-960 // 1710-2700 MHz
	<b>CERTIFICATION</b>	<b>BAND SUPPORT</b>
	FCC, CE	1/3/5/7/8/20/2/4/5/12/13/28
	<b>DONOR</b>	<b>SERVER</b>
		✓
 <b>A11-V43-100</b>	Indoor Omni Antenna	698-960 // 1710-2700 MHz
	<b>CERTIFICATION</b>	<b>BAND SUPPORT</b>
	FCC, CE	1/3/5/7/8/20/2/4/5/12/13/28
	<b>DONOR</b>	<b>SERVER</b>
		✓

Additional Cel-Fi Antenna options are available at [www.cel-fi.com/antennas](http://www.cel-fi.com/antennas)



# Cel-Fi GO X Quick Start Guide

Smart Signal Booster™



Cel-Fi GO X is optimised for stationary applications such as buildings, factories, warehouses, and similar. It features 100dB of system gain and provides the largest mobile coverage footprint in its category.

### IN THE BOX



Main Unit



Power Supply

\*Other variations of the product package may include additional internal and external antennas or components.

# Specifications:

## Frequency Support

Multiple variations of the product are available with different frequency support.

Model: G32-2/4/5/12/13X

BAND	NAME	DOWNLINK	UPLINK
2	1900 PCS	1930	1990
4	AWS-1	2110	2155
5	850	869	894
12	700 a	729	746
13	700 c	746	756

Model: G32-1/3/5/7/8/20X

BAND	NAME	DOWNLINK	UPLINK
1	2100	2110	2170
3	1800+	1805	1880
5	850	869	894
7	2600	2620	2500
8	900	925	960
20	800 DD	791	821

## Dimensions

LENGTH	WIDTH	HEIGHT	WEIGHT
272.5 mm	96.5 mm	43.5 mm	850 g

## Gain

Up to 100dB system gain

## Power (max)

DOWNLINK TX	UPLINK TX
10dBm/5 MHz (16dBm per band)	24dBm per band

## Bluetooth (LE Ver 4.2)

FREQUENCY	POWER
2042 - 2480 MHz	0dBm

Bluetooth: LE Ver 4.2

Bluetooth frequency: 2042 - 2480 Mhz

## Environmental

Operating Temp: 0 - 65C

Relative Humidity: 95%

## Antenna Connectors

### Certifications (All variants)

SMA-Female

3GPP TS 25.143 Rel.10

3GPP TS 36.143 Rel.10

RoHS 2

BQB (Bluetooth)

IP65 rated

(G32-2/4/5/12/13 variants only)

FCC

ISED

UL 62368-1:2014

CSA C22.2#62368-1

UL 50E, UL 60950-22

CSA C22.2#60950-22

(G32-1/3/5/7/8/20 variants only)

IEC 62368-1:2014

EN 301 489-1 v2.1.1

EN 301 489-17 v3.1.1

EN 301 489-50 v2.2.0

EN 301 908-1 v11.1.1

EN 301 908 v11.1.2

EN 301 908 v11.1.2

EN 300 328 v2.1.1

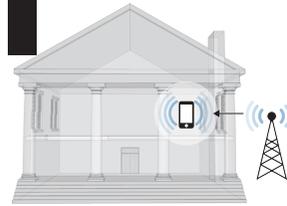
EN 62311 (2008)

Regulation (EC) 1275/2008 (Standby and Off mode)

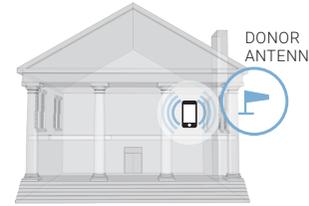
Regulation (EC) 278/2009 (External Power Supply)

# Cel-Fi GO X Installation

## 1 Install Donor Antenna



Find the location with the best signal.



Install **Donor Antenna** where the mobile device receives this signal.

DONOR ANTENNA NOT INCLUDED

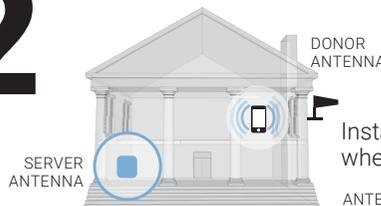


**SAFETY: DO NOT INSTALL** any equipment close to power lines or drill into walls or other structural elements without first ensuring the location is safe and that there are no hidden items that could cause injury.

### TIPS AND TECHNIQUES

- Install antenna at least 12 inches from any other antennas for best performance
- Antenna should be free of obstructions
- Antenna should be away from windows (including sunroof or other openings)
- Install 8 inches away from any people

## 2 Install Server Antenna



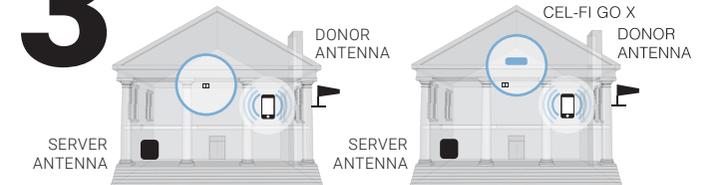
Install **Server Antenna** where coverage is needed.

ANTENNA NOT INCLUDED

### TIPS AND TECHNIQUES

- For best results, install Donor and Server Antennas such that there is substantial material between the antennas. This will create isolation and allow the system to perform at higher gain without oscillation or feedback.
- Keep **Donor** and **Service Antennas** separated/isolated from each other for best performance
- Do not use cable splitters for **Donor Antennas**.
- Follow the installation instructions for your chosen antennas.

## 3 Mount Cel-Fi GO X Near Power Outlet

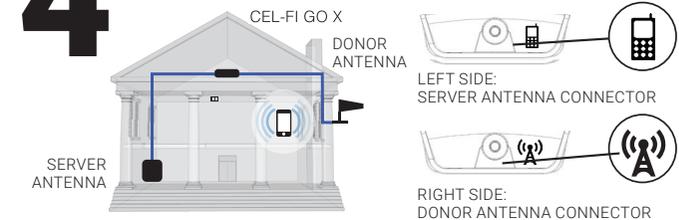


Find a power outlet.

Mount **Cel-Fi GO X** near the power outlet.

**DO NOT** plug in at this time.

## 4 Connect Donor & Server Antennas to the Cel-Fi GO X Unit

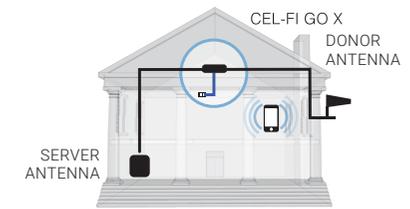


LEFT SIDE: SERVER ANTENNA CONNECTOR

RIGHT SIDE: DONOR ANTENNA CONNECTOR

## 5 Plug in Cel-Fi GO X

Your **Cel-Fi GO X** will automatically select the strongest mobile signal to boost.



## 6 Setup System with Cel-Fi WAVE

The system is configured to automatically select the best mobile service to boost. This step can be skipped for any user that wants to keep the automatic settings. However, a user may manually configure the system's boost preferences using the **Cel-Fi WAVE** app. To do this, use the **Cel-Fi WAVE** app on a smartphone with Bluetooth enabled to connect to the **Cel-Fi GO X** system, and manage the boost settings.



Bluetooth