



Cel-Fi GO M Quick Start Guide

Smart Signal Booster™



Cel-Fi GO M is optimized for mobile applications such as trucks, boats, and RVs. It features the IntelliBoost™ technology which allows it to automatically adjust to the fast changing cellular network conditions as you move. **ONLY** when the signal is poor, will the IntelliBoost maximizes gain while boosting thus preventing any potential degradation of existing cellular service.

IN THE BOX



Main Unit



Power Supply

IN THE MOBILE KIT

Included in the Mobile Kit (MK) version:

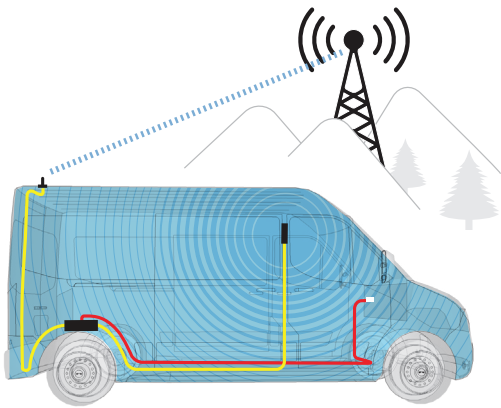


External Magnetic Mount
(Mag Mount) Antenna
(used as the donor)



Interior Patch
Server Antenna

For more information, visit: www.cel-fi.com



Basic Functionality

The **Cel-Fi GO M** connects to an external Donor Antenna to draw in a cellular signal from the macro network. The **Cel-Fi GO M** Smart Signal Booster finds the appropriate cellular 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 Stationary version ("GO X") of the product is available. Go to 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 M

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

NEMA 4 Rating

The **Cel-Fi GO M** is NEMA 4 rated, and can be used both indoors and outdoors.

The NEMA 4 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

Specifications:

Frequency Support

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

Model:

G32-2/4/5/12/13M

| BAND | NAME | DOWNLINK | | UPLINK | |
|------|----------|----------|------|--------|------|
| 2 | 1900 PCS | 1930 | 1990 | 1850 | 1910 |
| 4 | AWS-1 | 2110 | 2155 | 1710 | 1755 |
| 5 | 850 | 869 | 894 | 824 | 849 |
| 12 | 700 a | 729 | 746 | 699 | 716 |
| 13 | 700 c | 746 | 756 | 777 | 787 |

Gain

Up to 65dB system gain

Model:

G32-1/3/5/7/8/20M

| BAND | NAME | DOWNLINK | | UPLINK | |
|------|--------|----------|------|--------|------|
| 1 | 2100 | 2110 | 2170 | 1920 | 1980 |
| 3 | 1800+ | 1805 | 1880 | 1710 | 1785 |
| 5 | 850 | 869 | 894 | 824 | 849 |
| 7 | 2600 | 2620 | 2690 | 2500 | 2570 |
| 8 | 900 | 925 | 960 | 880 | 915 |
| 20 | 800 DD | 791 | 821 | 832 | 862 |

Gain

Up to 70dB system gain

Dimensions

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

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

SMA-Female

Certifications

(All variants)

3GPP TS 25.143 Rel.10

3GPP TS 36.143 Rel.10

RoHS 2

BQB (Bluetooth)

NEMA-4

(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)

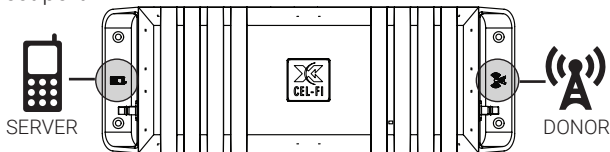
Regulation (EC) 1275/2008 (Standby and Off mode)

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

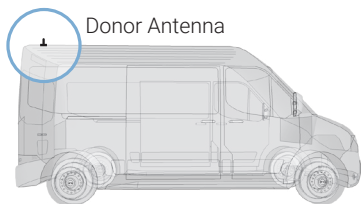
Cel-Fi GO M Installation

Before You Begin

Cel-Fi GO has a **Donor Antenna Port** and a **Server Antenna Port**. They are marked on the device with icons (see illustration). It is critical that the **Donor** and **Server** antennas are connected to the correct port.



1 Install Donor Antenna

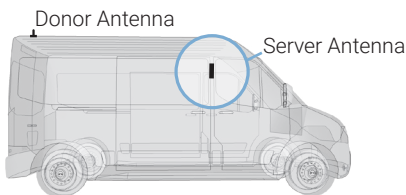


Place the Donor Antenna on the vehicle. Make sure you consider the entire system and required cable lengths.

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
- For best performance make sure there is 50cm of metal around the base of the antenna.

2 Install Server Antenna



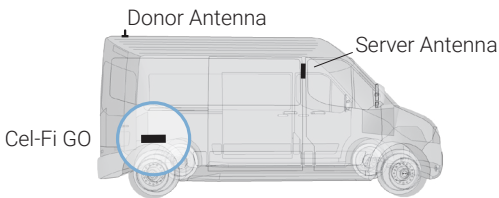
Install Server Antenna in the cab where coverage is needed.

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 **Server Antennas** separated/isolated from each other for best performance.
- The power supply may not be NEMA 4 rated.

3

Mount Cel-Fi GO M



Find a good mounting location in your vehicle. Location should have airflow (for cooling) and be secure from contact with external objects.

Make sure the unit is within cable range of the 12V power supply on your vehicle.

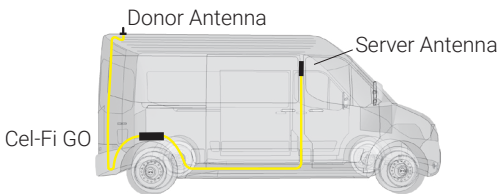
Best to make sure all cable lengths support the intended mounting location BEFORE permanent mounting.



DO NOT
plug in at
this time.

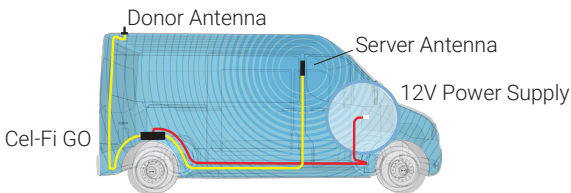
4

Connect Donor & Server Antennas to the Cel-Fi GO M Unit



5

Plug in Cel-Fi GO M



User Interface

Cel-Fi GO M 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. |

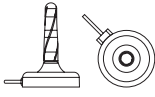
*NOTE: In mobile usage, it is normal for the **Cel-Fi GO M** to fluctuate between scanning and boosting. The **Cel-Fi GO M** automatically adjusts its boost behavior based on available signal.*

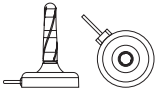
Troubleshooting

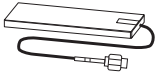
| ISSUE | MEANING | ACTION |
|--------------------------|---|---|
| Continual Blinking GREEN | Unit is operational, but not attaching to a network to boost. | <ul style="list-style-type: none"> Make sure both antennas are connected properly and are appropriate for the desired frequencies to boost. Make 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. |
| Solid RED LED | Unit is not operational. | <ul style="list-style-type: none"> Unplug and reinsert power. If restart has no effect, contact vendor for remedy. |

Antenna Kitting

The following antennas are authorized to be used with **Cel-Fi GO M** Smart Signal Booster:

| MODEL | DESCRIPTION | FREQUENCY |
|--|----------------------|--------------------------|
|  A41-V21-100 | Mobile Mag Mount | 698-960 // 1710-2700 MHz |
| | CERTIFICATION | BAND SUPPORT |
| | FCC | 2/4/5/12/13/28 |
| | DONOR | SERVER |
| | ✓ | |

| MODEL | DESCRIPTION | FREQUENCY |
|--|----------------------|--------------------------|
|  A41-V21-101 | Mobile Mag Mount | 698-960 // 1710-2700 MHz |
| | CERTIFICATION | BAND SUPPORT |
| | CE | 1/3/5/7/8/20 |
| | DONOR | SERVER |
| | ✓ | |

| MODEL | DESCRIPTION | FREQUENCY |
|--|----------------------|-----------------------------|
|  A41-V30-100 | Patch Antenna | 698-960 // 1710-2700 MHz |
| | CERTIFICATION | BAND SUPPORT |
| | FCC, CE | 1/3/5/7/8/20/2/4/5/12/13/28 |
| | DONOR | SERVER |
| | | ✓ |

Additional Cel-Fi Antenna options are available at www.cel-fi.com/antennas



420N007-G32-011-12RD