



Installation Guide

Carrier – NaturaLINE, PrimeLINE, ThinLINE, EliteLINE

1. Electrical Ratings and Requirements

Product Supply Ratings

Power Supply: 18-36 VAC 50-60 Hz or 12-36 VDC, 2A

WARNING

These procedures should only be performed by trained installation technicians. High voltage/current lines are present and caution should be used to prevent injuries. Installer must conform to local standards and ordinances as required.

IMPORTANT

Make sure that power is off, unit is disconnected and that no damages have occurred during drilling.

2. Required Tool Kit

- 13mm (1/2 ") Drill Bit
- Center Punch
- Cutting compound for the drill
- Drill for removing burrs
- Degreasing rags
- 18mm open face wrench
- Side cutting pliers
- Magnet
- Cable Ties

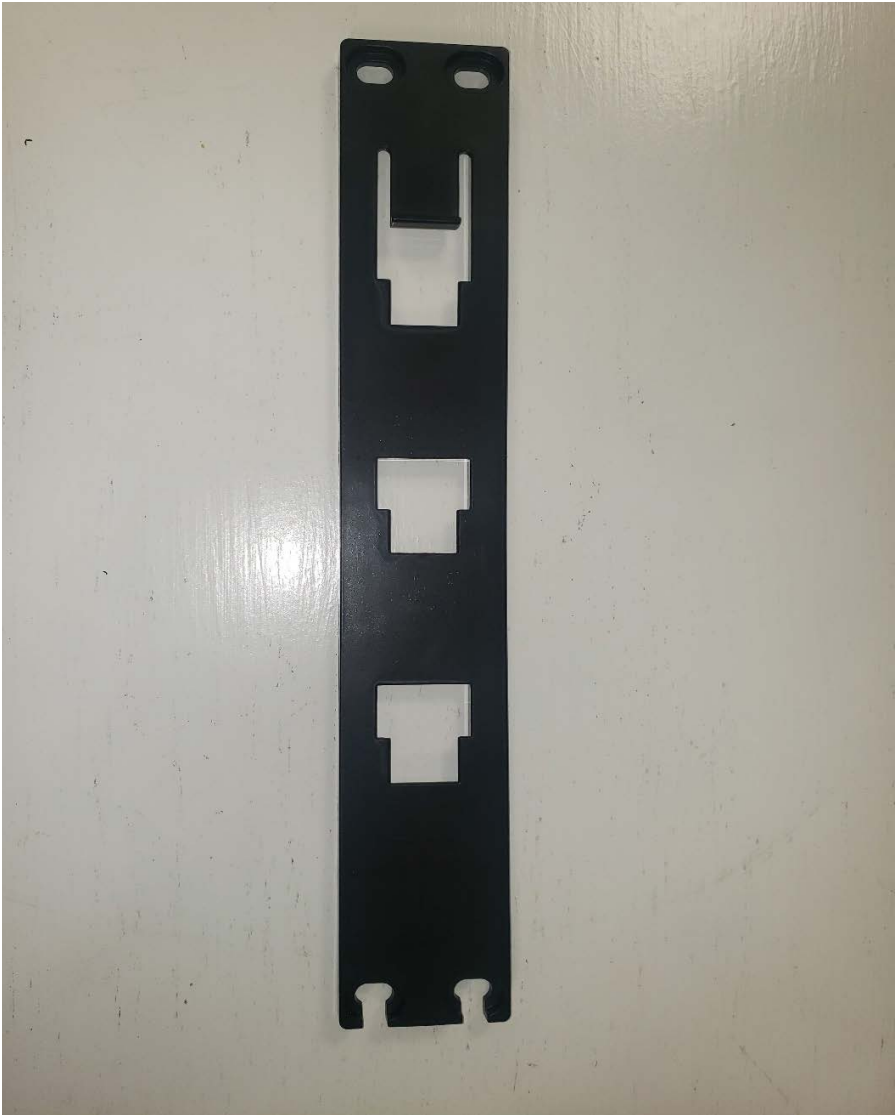
3. GT Sense Reefer Kit

A complete GT Sense Reefer Kit includes:

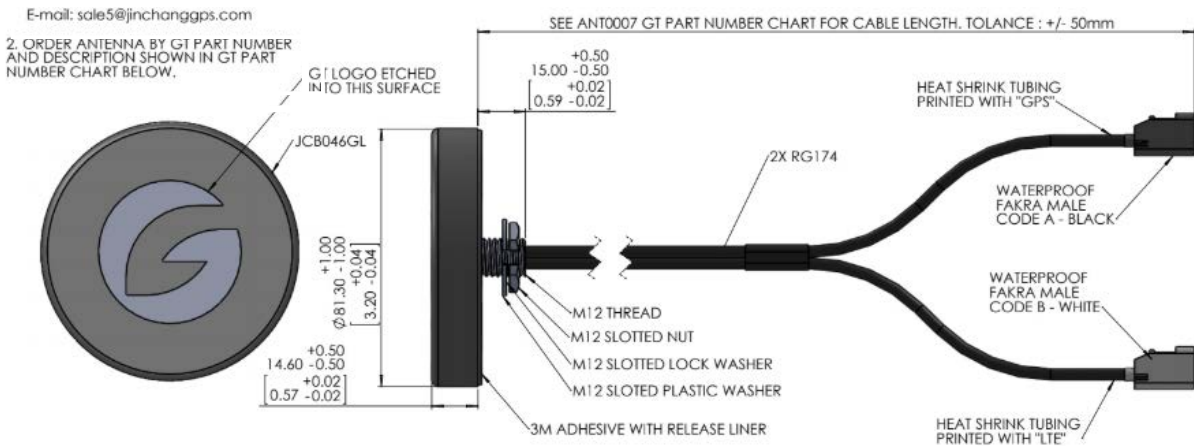
1. GT Sense Device
2. Antenna (80 mm diameter round black version with 3M VHB tape and threaded mount on the back cables and connectors
3. RMM Cable



4. RMM Bracket



5. Installation



Before beginning the antenna installation, please [print and cut out the template](#) to use for locating the antenna mounting hole.

Step 1

Use the antenna installation template to locate the antenna placement on the access cover.

Place the template towards the edge of the access cover and mark the center point.

Check that there is nothing on the inside surface of the access cover that could be damaged when a hole is drilled in the centre-punched location.

NOTE: Avoid blocking the information labels.

NOTE: If an antenna by another company is already mounted, DO NOT remove it.



Step 2

Drill a 13 mm (1/2") hole at the centre-punched mark. Remove all burrs after drilling.



Step 3

Degrease/clean the surface where the antenna will be mounted with a metal cleaner or similar before fitting the antenna.



Step 4

Remove the nut, lock washer, and plastic washer from the threaded mount on the backside of the antenna by slipping them off the antenna cable via the slots.

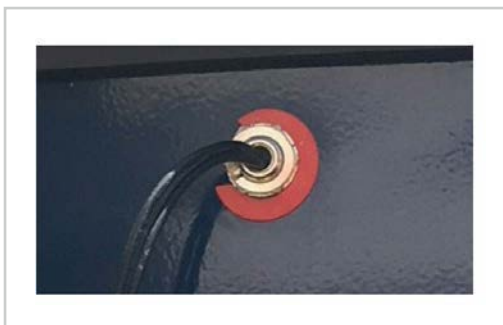
Step 5

Insert the connector end of the antenna cable through the drilled hole in the access cover. Remove the 3M VHB table liner from the backside of the antenna. Push the thread mount through the drilled hole and secure the antenna cables.

Note: Specific orientation/rotation of the antenna is not required.

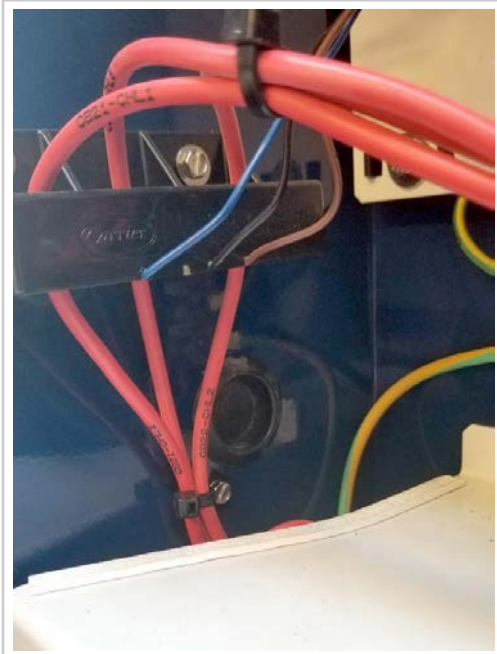
Step 6

Replace the plastic washer, lock washer and nut on the antenna threaded mount on the inside of the access cover. Tighten the nut firmly with the 18mm open face wrench, torque to 1.5 N-m (11.5 in-lbs).



Step 7

Remove the access plug from side of control box. Cut a hole in the plug and run cables trough. Seal with silicone.



Step 8

If a modem is already present in the RMM slot, remove it maintaining the Mounting screws and unplug all the connections

Step 9

Route the antenna cables across the door hinge through existing cable channel (if present) to the RMM slot using the cable ties to secure the cables. Do not be concerned with the extra length of cable at this time.

Step 10

Fit the GT Sense Device into the RMM slot and secure with the screws from the removed modem. If no modem was removed, use the M5 screws and mylar washers provide in the RMM bracket kit.



Insert GT Sense and slide down and lock in place

Step 11

Connect and secure the antenna cables to appropriate Farkas connectors on the GT Sense Device before connecting the RMM cable to the



The antenna cables are identified by labels near the connector ends. The corresponding Farkas connectors on the GT Sense Device are identified with the names “GPS” and “CELL”.

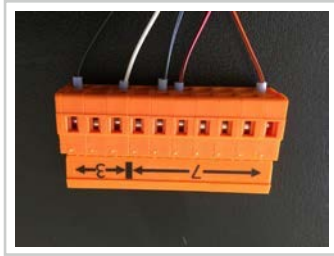
After connecting the antenna cables, attach the RMM cable to the mating connector on the GT Sense Device and secure with the screws provided on the connector.

Step 12

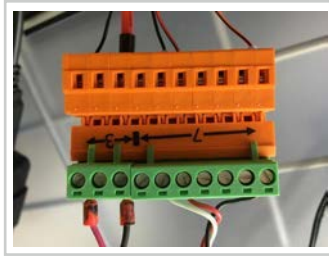
Plug the 3 and 7 position connector into the orange 10 position connector on the end of the GT RMM Cable as indicated by the 3/7 label on the 10 position connector.

If the RMM Cable you are installing has an inline fuse, the fuse is intended to be

on the Ground Line for A/C reverse polarity protection for the GT Sense Device.



Orange Connector on
CBL0037 GT RMM Cable



The 3 and 7 position
connector plugged into
the orange 10 position
connector.

Step 13

Secure any extra length of antenna cable or RMM cable with cable ties making sure not cables are in tension.

Step 14

Secure the control box door.

Step 15

Use the Installation app to verify GPS and communications are working (future).

Installation complete.

FCC/CE Compliance

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

FCC RF exposure statement:

The equipment complies with FCC Radiation exposure limit set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This product contains the following antennas:

LoRa 868-915; Peak Gain 1.1 dBi

LoRa 783; Peak Gain 0.2 dBi

Bluetooth; Peak Gain 1.8 dBi

CE Warning

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

This device in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. All essential radio test suites have been carried out.

1. CAUTION : RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.
2. Adapter shall be installed near the equipment and shall be easily accessible.
3. The plug considered as disconnect device of adapter.
4. The device complies with RF specifications when the device used at 20mm form your body.