



Excellence in Compliance Testing

Certification Exhibit

FCC ID: AMH101002

IC: 10124A-101002

FCC Rule Part: 15.247

IC Radio Standards Specification: RSS-210

ACS Project: 12-2036

Manufacturer: Locus Solutions LLC

Model: SmartTraxx Fixed

User Manual



What's happening.
Where it's happening.
As it's happening.

LocusTraxx™

User Guide

System Description

The Locus Traxx Fixed wireless system enables fresh produce shippers to deliver produce with a freshness confidence. The system does this with a series of radio systems that wirelessly track product location, temperature, and other condition and, or shipment sensors. Sensor modules termed "Smart Tags" transmit their information via a 802.15.4 local wireless network back to a central portable or fixed unit. The portable, or fixed units, concatenate this local sensor information with position data from a dedicated GPS receiver and transmits the data package to a central motoring facility through either a GSM cellular or Iridium network.

Installation

Hooking up the Fixed System (Performed by a Professional LocusTraxx Installer)

1. Remove the fixed unit from the shipping container. On the top side of the device, verify that the Green LED is flashing indicating that the unit is awake.
2. Attach the fixed unit to a covered section of the host vehicle. Connect host battery power to the fixed unit with appropriate cables.
3. Connect the dipole antenna port to the refrigeration container RF SMA feed through with the RF cable provided. Connect the dipole antenna inside the refrigeration container. Apply Silicone sealant over each outer SMA connector.
4. Connect the triband combination antenna to the fixed unit and splitter and route the RF cables such that the combination puck antenna can be mounted with a clear view of the sky. Apply Silicone sealant over each outer SMA connector.
5. Remove the Smart Tag unit(s) from the shipping case and place on item to be monitored. For optimal performance, insure that the Tag operates within approximately 60 feet of the fixed mounted section.
6. Verify that the system is correctly monitoring the tag temperature and current location.

Monitor the Item

1. In a web browser open www.locustraxx.com and login with the user ID and password provided.

Radio Comments

Optimum performance of the Smart Traxx system may require repositioning of the Smart Tag in relation to the fixed or portable device. Excessive attenuation of the RF communication can result if the line of sight is obstructed by materials that significantly attenuate the signal. It is therefore advised to keep this in mind when positioning your wireless system.

Warning: Changes or modifications to this device not expressly approved by Locus Traxx could void the user's authority to operate the equipment.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

802.15.4 Quarter Wave Dipole: 2.15 dBi.

Puck Antenna:

GSM (EGSM,DPCS): 1 dBi max.

2.4 GHz ISM: 1dBi

A professional antenna installer from Locus Traxx is required and used on all installations. To improve connection durability and enable tamper resilience, a

silicone sealant is applied over the outer barrel of each electrical connection to and from the unit.

Class B Devices:

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.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

RF Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.