



C2Ag LLC ISN-1 Transceiver OEM Installation Guide

Rev 2.0

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Overview

The C2Ag ISN-1 transceiver module has been granted limited modular approval for fixed locations. The module is designed specifically for and operates exclusively within C2Ag products. In order to ensure proper integration into the final product and maintain compliance with the rules and regulations under which this module has been granted certification, the following requirements must be followed.

Compliance Requirements:

1. The use of this module is for C2Ag products only and may not be used in any other products.
2. This module does not contain any user serviceable parts and must be returned to C2Ag for a replacement module.
3. This module is limited to fixed applications.

FCC Part 15 Statements:

- a. CFR 47 Part 15.19 Labeling Requirements – Host product must bear the following in a conspicuous location on the device.
 - i. 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.
- b. Part 15.21 Information to the user – The user's manual shall contain the following caution:
 - i. This device complies with part 15 of the FCC Rules, and any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- c. Part 15.105 Information to the User – The user's manual shall contain the following:
 - i. NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
4. A label must be affixed to the outside of the host product with the following statement:

This device contains FCCID: 2AFK4-ISN1

5. The final host / module combination may also need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

Industry Canada Compliance

- a) User manuals for transmitters shall display the following notice in a conspicuous location:

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.

French version of above:

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.

- b) A label must be affixed to the outside of the host product with the following statement

This device contains IC: 20563-ISN1

- c) User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:

This radio transmitter IC: 20563-ISN1 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.

French version of above:

Le présent émetteur radio IC:20563-ISN1 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.

Authorized Antennas:

The C2AG custom antenna assembly FDM Local Network Assembly Part Number 100327-000 is the only antenna authorized for use.

- d) User manuals for licence-exempt radio apparatus shall contain the following or equivalent notice in a conspicuous location in the user manual or alternatively on the device or both.

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.

French version of above:

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.

- e) The presence of the label on the ITE represents the manufacturer's or importer's Self-Declaration of Compliance (SDoC) to Industry Canada ICES-003. Each unit of an ITE model shall bear a label indicating the model's compliance with ICES-003.

The label shall be permanently affixed to the ITE or displayed electronically and its text must be clearly legible. When the dimension of the device is too small or it is otherwise not practical to place the label on the ITE, the label shall be placed in a prominent location in the user manual supplied with the ITE. The user manual may be in an electronic format and must be readily available.

Industry Canada ICES-003 Compliance Label:

CAN ICES-3 ()/NMB-3(*)*

* Insert either "A" or "B" but not both to identify the applicable Class of ITE.

RF Exposure Requirements

1. The user's manual for the host product must clearly indicate the operating requirements and conditions that must be observed to ensure compliance with current FCC / IC RF exposure guidelines. To comply with FCC / IC regulations minimum separation distances of 12 cm for occupational controlled and 30 cm for uncontrolled / general population limiting both maximum RF output power and human exposure to RF radiation.
 - a. This module is only approved for use with a custom antenna assembly, which uses the Laird Technologies OD9-5 antenna, supplied by C2Ag.
 - b. The C2Ag system and antenna shall be installed professionally by C2Ag authorized personnel. The installer is responsible for ensuring system placement to maintain RF exposure compliance.

Revision History

Rev 2.0 – December 23, 2015

- Clarified the authorized antenna information on page 4, with the C2Ag custom antenna information.

Rev 1.4 – October 28, 2015

- Modified some text at RLI and added required compliance statements

Rev 1.3 – October 27, 2015

- Added IC number for Bluetooth module.

Rev 1.2 – October 23, 2015

- Updated Required Operating Conditions for end user.

Rev 1.1 – October 16, 2015

- Formatted document.
- Edited FCC transceiver list.

Rev 1.0 – October 15, 2015

- Preliminary document created.