



**C2Ag LLC ISN-G-1 Transceiver
OEM Installation Guide**

Rev 2.1

March 3, 2016

Table of Contents

Overview	3
Compliance Requirements:.....	3
FCC RF Exposure Requirements	4
Industry Canada Compliance	4
Required Operating Conditions for end users	5
Revision History	6

Overview

The C2Ag ISN-G-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. The host product with the module installed must be evaluated for simultaneous transmission requirements.
3. This module does not contain any user serviceable parts and must be returned to C2Ag for a replacement module.
4. This module is limited to fixed applications.
5. 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.
6. A label must be affixed to the outside of the host product with the following statements:

This device contains FCCID: 2AFK4-ISNG1

This equipment contains equipment certified under ICID: 20563-ISNG1

7. 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.

FCC 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.
2. **IMPORTANT – Include following statement in User's Manual:** A 20 cm minimum separation distance must be maintained between the antenna and user. Under such conditions, the radio frequency exposure limits set forth for general population/uncontrolled environment can be satisfied.

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 include:
Built in PCB antenna.

- 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.

Required Operating Conditions for end users

1. The ISN-G-1 does not contain any user adjustable parameters that can affect the RF transceiver operation.
2. The ISN-G-1 can only be used with the built-in PCB antenna. There are no external antenna connections available.
3. The host product shall be professionally installed by C2Ag authorized personnel.

Revision History

Rev 2.1 – March 3, 2016

- Updated documentation to address RF Exposure information for inclusion in User Manual

Rev 2.0 – March 3, 2016

- Updated documentation with IC information.

Rev 1.1 – December 18, 2015

- Fixed formatting and spelling errors.

Rev 1.0 – October 27, 2015

- Preliminary document created.