FreeWave W0900-01 RF Module Guide

Part Number: LFC0003AA
Revision: A
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Federal Communication Commission Interference Statement

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 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 technician for help.

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

FCC Radiation Exposure Statement

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

OEM Integration Conditions

This device is intended only for OEM integrators under the following conditions:

1. The antenna must be installed such that 94 cm is maintained between the omni antenna and users
2. The antenna must be installed such that 260 cm is maintained between the yagi antenna and users
3. The transmitter module may not be co-located with any other transmitter or antenna

As long as the above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT! In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

List of certificated antennas

Model	Type	902-928MHz	MPE Distance
Wavelink – PRO0902-11	**Omni**	**11 dBi**	**94 cm**
Wavelink – PRO0902-16	**Yagi**	**16 dBi**	**260 cm**

End Product Labeling
This transmitter module is authorized only for use in device where the antenna may be installed such that 94/260 cm may be maintained between the antenna and users.

The final end product must be labeled in a visible area with the following: "Contains FCC ID: KNYPRW1001ER".

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Industry Canada Statement

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. *('utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 94/260 cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 94/260 cm de distance entre la source de rayonnement et votre corps.

OEM Integration Conditions

This device is intended only for OEM integrators under the following conditions:

1. The transmitter module may not be co-located with any other transmitter or antenna.

As long as 1 condition above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:

1. Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

Tant que les 1 condition ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

IMPORTANT: In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

IMPORTANTE: Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considéré comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

End Product Labeling
The final end product must be labeled in a visible area with the following: “Contains IC:2329B-PRW1001ER”.

Plaque signalétique du produit final
Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante:
"Contient des IC: 2329B-PRW1001ER".

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.

This radio transmitter (identify the device by certification number, or model number if Category II) 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 (IC: 2329B-PRW1001ER) 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.

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Introduction

This document describes the applicability of user operation of FreeWave's W0900-01 RF module to keep compliance with regulatory requirements.

Host System

This module is intended to be used only with FreeWave's system products. FreeWave's system must supply regulated voltage to the module.

Antenna Usage

This module can only be used with the type of antennas approved to be used with FreeWave's system. The use of a higher gain or a different type of antenna than the antennas approved with FreeWave's FCC submission requires new FCC approval.

The antennas used with this module may only be collocated and placed as identified on the FCC grant.

Certificated Antennas

Model	Type	5150~5.850MHz
Wavelink – PRO0902-11	**Omni**	**11 dBi**
Wavelink – PRO0902-16	**Yagi**	**16 dBi**

Module Label

The host system containing this module must either:

- Make the module label visible so the FCC ID is visible in the installation
- Label the end system product with the FCC ID and IC ID of the module

Professional Installation Instructions

1. Installation personnel

   This product is designed for specific applications and needs to be installed by qualified personnel who have RF and related rule knowledge. The general user shall not attempt to install or change settings.

2. Installation location

   The product shall be installed at a location where the radiating antenna can be kept 26 cm from nearby persons in normal operation condition to meet regulatory RF exposure requirement.

3. External antenna

   Use only the antennas that have been approved by the applicant. A non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC

limit and is prohibited.

4. Installation procedure

   This module must be professionally installed within FreeWave's host system. This module uses a standard PCI express electrical and data interface. The host in which this module is integrated provides a stable 3.3 VDC power to this module through a regulator circuit. This module when plugged into the host system doesn't require any additional power supply and uses the host's power supply. Plugging other type of power supply that doesn't meet the specification will damage the module.

5. Install Position and Output Power

   Carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.