

LT1110-200 Compliance Information

1.1 AGENCY IDENTIFICATION NUMBERS

Family	US/FCC	CANADA/IC
LT1110-200	KQL-1110200	2268C-1110200

LT1110-200 FAMILY

Part #	Description	Packaging
PRM240	(+23 dBm), Pluggable with U.FL connector	PLG-U.FL
PRM241	(+23dBm), Pluggable with -1dBi integrated antenna	PLG-ANT

1.2 APPROVED ANTENNA LIST

LT1110-200 family has been designed to operate with the antennas listed below and having a maximum gain of 6dBd. The required antenna impedance is 50 ohms. To reduce potential radio interference to other users, the antenna type and gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication. The OEM is free to choose another vendor's antenna of like type and equal or lesser gain as an antenna appearing in the table and still maintain compliance.

Item	Part Number	Mfg.	Type	Gain
1	0915AT43A0026	Johanson	Chip	-1dBi
2	S467FL-6-PX-915S	Nearson	Dipole	2dBi
3	FG9026	Laird Technologies	Omni	6dBd
4	YS8963	Laird Technologies	Yagi	6dBd

1.3 FCC/ IC REQUIREMENTS FOR MODULAR APPROVAL

In general, there are two agency classifications of wireless applications; portable and mobile.

Portable – Portable is a classification of equipment where the user, in general, will be within 20 cm of the transmitting antenna. Portable equipment is further broken down into two classes; within 2.5 cm of human contact and beyond 2.5 cm. The LT1110-10 family is not agency approved for portable applications. The OEM is required to have additional evaluation performed to receive this classification. Contact Laird Technologies for more details.

Mobile – Mobile defines equipment where the user will be 20 cm or greater from the transmitting equipment. The antenna must be mounted in such a way that it cannot be moved closer to the user with respect to the equipment, although the equipment may be moved.

This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20 cm from the human body.

1.4 CAUTION

Any changes or modifications not expressly approved by Laird Technology could void the user's authority to operate this equipment. The LT1110-200 is a 902-928 MHz Frequency Hopping Spread Spectrum transmitter. This module is designed to be installed, operated, and used by system integrators and/or professional installers. As such, the product is required to comply with all applicable FCC equipment authorization regulations, requirements and equipment functions not associated with the transmitter module. The OEM is responsible for demonstration of compliance to regulations for non-transmitter components within the host product to requirements for unintentional radiators (Part 15B), such as digital devices and to additional authorization requirements for the non-transmitter functions of the transmitter module (i.e., Verification, or Declaration of Conformity) (e.g., Bluetooth and WiFi transmitter modules).

1.5 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 not 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:

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

1.6 OEM EQUIPMENT LABELING REQUIREMENTS

The OEM must ensure that FCC labeling requirements are met. This includes a clearly visible label on the outside of the OEM enclosure specifying the appropriate identifier for this product as well as the FCC notice below.

Contains FCC ID: KQL-1110200

IC: 2268C-1110200

This enclosed 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.

Label and text information should be in a size of type large enough to be readily legible, consistent with the dimensions of the equipment and the label. However, the type size for the text is not required to be larger than eight point.

1.7 IC TRANSMIT ANTENNAS

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain as authorized 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.

This radio transmitter 2268C-1110200 has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in the above list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

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.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) 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.

IC License Exempt Radio

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.

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.