

# RM024 Compliance Section

## RM024 FCC / IC Information

### Agency Identification Numbers

Family	US/FCC	CANADA/IC
RM024	KQL-RM024	2268C-RM024

### RM024 FAMILY

*PART #	FORM FACTOR	TX OUTPUT	ANTENNA
RM024-S125-C-XX	Surface Mount	125mW	U.FL
RM024-S125-M-XX	Surface Mount	125mW	U.FL or chip
RM024-P125-C-XX	Pluggable	125mW	U.FL
RM024-P125-M-XX	Pluggable	125mW	U.FL or chip
RM024-S50-C-XX	Surface Mount	50mW	U.FL
RM024-S50-M-XX	Surface Mount	50mW	U.FL or chip
RM024-P50-C-XX	Pluggable	50mW	U.FL
RM024-P50-M-XX	Pluggable	50mW	U.FL or chip

*\*Last two slots "XX" in Part # are used for custom setups. Can be values 01-99*

### Antenna Information

RM024 family has been designed to operate with the antennas listed below and having a maximum gain of 9dBi. The required antenna impedance is 50 ohms.

Item	Part Number	Mfg.	Type	Gain (dBi)
1	WIC2450-A	Laird Technologies	Chip	2
2	NZH2400-MMCX	Laird Technologies	Microstrip	1
3	ID2450-RS36	Laird Technologies	Panel	9
3	IG2450-RS36	Laird Technologies	Omni	6
4	S151FC-L-(132)PX-2450S	Nearson	Dipole	5

- 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. *Refer ence FCC Part 15.204(c)(4) for further information on this topic.*
- 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.

## POWER EXPOSURE INFORMATION

In general, there are two agency classifications for RF radiation exposure in wireless applications; portable and mobile.

**Mobile** – A mobile device is defined as a transmitting device designed to be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structures and the body of the user or nearby persons. The RM024 is fully modular approved for mobile and fixed applications. *Reference FCC Part 2.1091 for further details on mobile devices.*

**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 RM024 does not hold a portable approval classification due to its peak output power and modular approval restrictions. Further RF evaluation is required by customers who want to use the RM024 in portable applications. Contact a qualified test house or a Laird Technologies representative for further information on this topic. *Reference FCC Part 2.1093 for further details on portable devices.*

**Maximum Permissible Exposure** report has been created which shows the minimum distances for Public and Occupational use of the RM024.

Occupational Limit Minimum Distance = 4cm Public Limit Minimum Distance = 9cm
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*Full MPE report available upon request*

## OEM RESPONSIBILITIES

**WARNING:** 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 Laird Technology FCC identifier for this product as well as the FCC notice below.

Contains FCC ID: KQL-RM024
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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
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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.

**CAUTION:** The OEM should have their device which incorporates the RM024 tested by a qualified test house to verify compliance with FCC Part 15 Subpart B limits for unintentional radiators.

**WARNING:** This device has been tested with an U.FL connector and the antennas listed in the table above. When integrated into the OEM's product, these fixed antennas require professional installation preventing end-users from replacing them with non-approved antennas. Any antenna not listed in the above table must be evaluated for compliance with FCC Part 15.203 for unique antenna connectors. Contact Laird Technology for assistance.

**WARNING:** This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20 cm from the human body. Operation at distances of less than 20 cm requires additional RF exposure evaluation and possible testing, including SAR requirement according to FCC RF Exposure guideline.

**CAUTION:** Any changes or modifications not expressly approved by Laird Technology could void the user's authority to operate the equipment.

**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 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.