RDL-3000 Family

Broadband Wireless Systems

RDL-3000-RMG3

Radio Modules

Product Manual

Copyright Information

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1 Product Overview

The RDL-3000-RMG3 radio module is comprised of a proprietary Media Access Control (MAC) protocol engine and Time Division Duplexing (TDD)/ Orthogonal Frequency Division Duplexing (OFDM) digital radio.

The module is not designed for stand-alone operation. The module is sold as one component of a packaged system which includes a suitable housing for the module connectors for required external components including a power supply and antenna system. This is afterwards referred to as the 'final product'. The final product may be designed and manufactured by Redline or a licensed third party.

Frequency settings within the specified frequency ranges are software keyed to be compliant with specific regulatory agency requirements in the region of deployment.

USA & Canada: 4900 to 5975 MHz

Important: Read this entire document prior to installing or operating these modules.

2 Conditions of Use

2.1 General Conditions

The RDL-3000-RMG3 module is not provided for sale to the general public. The module contains a proprietary radio interface and can not be directly connected to any standard telecommunications or computer devices. This manual is provided as supplement to technical and operational documentation and training provided by Redline and its agents.

Any operation or use of this module in any manner not expressly specified within this manual or approved in writing by Redline (or its agents) is expressly forbidden and voids the users right to operate the module. This includes, but is not limited to, any modification of the module hardware or software, installation of the module in a non approved enclosure, and use with non approved antennas.

2.2 Country of Use

Refer to the regulatory notices in this document before installing or operating the module.

Operation of the final product requires a software 'key' that is available exclusively from Redline or its authorized agents. The software key is unique to each module and must be installed and activated before the radio will operate. The key contains sufficient security features that the professional installer and operator can not decode, modify, substitute, or otherwise circumvent the operational restrictions imposed by the 'key'.

The software 'key' limits the transmit power, operating frequency range, and channel bandwidth per the regulator domain governing the location where the radio will be deployed. The operator does not have the option to select the country or regulatory region of operation.

A radio can be configured in either master or client mode of operation. A radio in client mode is always ‘passive listener’ and cannot initiate any transmission without receiving and decoding a valid authorization message from a licensed master. A radio in master mode (whether from start or after being switched from client mode) checks and controls all functionality of a given radio as a master -including full DFS capabilities as required - based on license key. The license key is issued to customers for every unit, based on geographic location of the unit (eg. US), with all the required regulatory compliance parameters enabled to ensure compliance

Operation in the United States

The RDL-3000-RMG3 module is certified with limited modular approval for use as an 'intentional radiator' in the United States as device FCC ID: QC8-RDL3000RMG3.

Operation in Canada

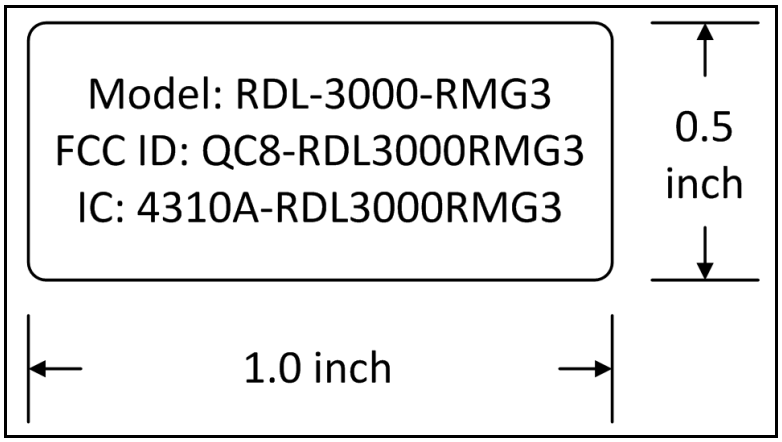
The RDL-3000-RMG3 module is certified with limited modular approval for use as an 'intentional radiator' in the Canada as IC: 4310A-RDL3000RMG3.

2.3 Product Labeling

2.3.1 Module Label

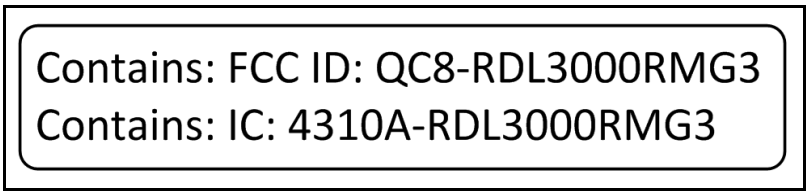
The modular transmitter will display a label referring to the FCC ID registration number and the Industry Canada IC registration number. An information label is applied directly to the modular transmitter (example shown below).

Do not to remove any labels from the module.



2.3.2 External Label

Information labels are applied to the final product. The final product features a label on the outside surface listing the registration number for the enclosed module. Do not to remove any labels from the module or the final product.



3 Module Installation and Service

3.1 Installation into a Final Product

The module must be installed only by trained professional technicians authorized by Redline or its agents. The module must be installed only into an approved enclosure (see Conditions of Use) and only at an approved manufacturing facility or service depot.

Redline shall retain complete control over the final installation of the module and will ensure compliance of the end product to all applicable FCC/IC regulations. The module must be installed only into an approved enclosure (see Conditions of Use) and only at an approved manufacturing facility or service depot.

Redline licensing of the modular transmitter includes monitoring to ensure compliance in the operation and use of the module as expressly specified within this manual. This includes restrictions against modification of the module hardware, approval of the final enclosure, operational restrictions for installers and end-users, and approval of antennas provided for use with the product.

Operation of the final product requires the 'key' be controlled exclusively by the manufacturer. The 'key' must be unique to each module and must be installed and activated before the radio will operate. The key must contain sufficient security features to the professional installer and operator can not decode, modify, substitute, or otherwise circumvent the operational restrictions imposed by the 'key'.

The software 'key' must limit the transmit power, operating frequency range, and channel bandwidth per the regulator domain governing the location where the radio will be deployed. The operator does not have the option to select the country or regulatory region of operation.

The software 'key' must limit the mode of operation as a master or client. The client mode is 'passive listener' and while in this mode the module can not initiate any transmission without first receiving and decoding a valid authorization message from the master. A module with a key for client operation can not be changed by the installer to enable master mode operation.

Redline will review all final products for compliance to regulatory restrictions.

The manufacturer must meet all labeling described in section 2.3.

3.2 Module Servicing

The module is not intended to be field serviceable, and contains no field serviceable or field replaceable parts. The module must be serviced only at an approved manufacturing facility or service depot.

 **Warning:** The module is susceptible to damage from electrostatic charge. Electrostatic Discharge (ESD) must be avoided to prevent damaging or destroying the module. The module must always be store in an anti-static container/bag prior to installation and following removal from the product for servicing. Observe ESD precautions when handling the module.

3.3 Professional Installation

Devices containing the module require professional installation. It is the responsibility of the installer to understand the product operation by attending training as required, reading and understanding the product documentation, and ensuring that all building, safety and regulatory codes are met and the installation is complete and secure.

3.4 Safety Precautions

Installation and service of the module must be performed by personnel having technical training and experience necessary to be aware of hazards during installation and/or service of RF equipment. The installation and/or service must be done using procedures designed to minimize any danger to technical personnel or any other person.

3.5 Radio Frequency Safety

The installer of this radio equipment must ensure the antenna is located or pointed such that it does not emit RF fields in excess of the general population limits as defined by:

- FCC CFR 47, Part 2.1091
  http://www.gpo.gov/fdsys/pkg/CFR-2009-title47-vol1/pdf/CFR-2009-title47-vol1-sec2-1091.pdf
- FCC OET Bulletin 65, Radio frequency radiation exposure evaluation for fixed devices
  http://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65c.pdf
- Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website:
  http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php

Refer to the regulatory statements included in this document.

4 Final Product Requirements

The following requirements apply to all final products incorporating an RDL-3000-RMG3, module.

4.1 Frequency Bands

Operation of the final product requires a software 'key' that is available exclusively from Redline. This key restricts device operation to the FCC/IC 4940-4990 MHz and 5725-5850 MHz or FCC 5150-5250 MHz MHz band. The professional installer and operator can not modify or otherwise circumvent these operational restrictions.

4.1.1 Antenna Use and Transmit Power

The module supports operation with 2x2 MIMO antenna systems with two transmit chains and two receive chains. The module must be used only with certified antennas and using the channel size and output power level specified by the FCC/IC regulations.

4.1.2 Certified Antennas

This device has been designed to operate with the antennas listed in the following table. Any additional antennas will be used only after authorization is obtained through Class II permissive change.

Table 1: Approved Antennas

Manufacturer	**Part #**	**Gain (dBi)**	**Frequency Range**	4940-4990 MHz	5150-5250 MHz	5725-5850 MHz
L-Com Redline *	HG5158DP-10U AOD-DB-0512-02	10 10	5100-5800 MHz 4940-5875 MHz	PMP PMP	PMP PMP	PMP PMP
Redline	30-00328-50	19	4900-5875 MHz	PTP PMP	PMP	PTP PMP
Redline	30-00362-00	24	4900-6100 MHz	PTP PMP	PMP	PMP PTP
Redline	A3FT3204LTPD	32	4900-5875 MHz	PTP PMP	PMP	PTP PMP

* Alternate (equivalent) antenna.

4.1.3 Power & EIRP (MIMO Operation)

4.9 GHz: FCC 47 CFR Part 90 Subpart Y and RSS-111

Table 2: 4.9 GHz: RF Power & EIRP: 5 MHz channel & 10 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4942.5	20.87	20.00	23.47	27.00	3.53	10.00	33.47	53.00	19.53
	4965.0	20.52	20.36	23.45	27.00	3.55	10.00	33.45	53.00	19.55
	4987.5	20.70	20.63	23.68	27.00	3.32	10.00	33.68	53.00	19.32
256-QAM	4942.5	20.82	20.12	23.49	27.00	3.51	10.00	33.49	53.00	19.51
	4965.0	20.55	20.48	23.53	27.00	3.47	10.00	33.53	53.00	19.47
	4987.5	20.71	20.64	23.69	27.00	3.31	10.00	33.69	53.00	19.31

Table 3: 4.9 GHz: RF Power & EIRP: 5 MHz channel & 19 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4942.5	20.87	20.00	23.47	27.00	3.53	19.00	42.47	53.00	10.53
	4965.0	20.52	20.36	23.45	27.00	3.55	19.00	42.45	53.00	10.55
	4987.5	20.70	20.63	23.68	27.00	3.32	19.00	42.68	53.00	10.32
256-QAM	4942.5	20.82	20.12	23.49	27.00	3.51	19.00	42.49	53.00	10.51
	4965.0	20.55	20.48	23.53	27.00	3.47	19.00	42.53	53.00	10.47
	4987.5	20.71	20.64	23.69	27.00	3.31	19.00	42.69	53.00	10.31

Table 4: 4.9 GHz: RF Power & EIRP: 5 MHz channel & 24 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4942.5	20.87	20.00	23.47	27.00	3.53	24.00	47.47	53.00	5.53
	4965.0	20.52	20.36	23.45	27.00	3.55	24.00	47.45	53.00	5.55
	4987.5	20.70	20.63	23.68	27.00	3.32	24.00	47.68	53.00	5.32
256-QAM	4942.5	20.82	20.12	23.49	27.00	3.51	24.00	47.49	53.00	5.51
	4965.0	20.55	20.48	23.53	27.00	3.47	24.00	47.53	53.00	5.47
	4987.5	20.71	20.64	23.69	27.00	3.31	24.00	47.69	53.00	5.31

Table 5: 4.9 GHz: RF Power & EIRP: 5 MHz channel & 32 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4942.5	17.98	17.20	20.62	21.00	0.38	32.00	52.62	53.00	0.38
	4965.0	17.52	17.62	20.58	21.00	0.42	32.00	52.58	53.00	0.42
	4987.5	18.50	17.37	20.98	21.00	0.02	32.00	52.98	53.00	0.02
256-QAM	4942.5	18.00	17.30	20.67	21.00	0.33	32.00	52.67	53.00	0.33
	4965.0	17.54	17.68	20.62	21.00	0.38	32.00	52.62	53.00	0.38
	4987.5	18.52	17.33	20.98	21.00	0.02	32.00	52.98	53.00	0.02

Table 6: 4.9 GHz: RF Power & EIRP: 10 MHz channel & 10 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4945.0	22.59	22.77	25.69	30.00	4.31	10.00	35.69	56.00	20.31
	4965.0	22.22	22.20	25.22	30.00	4.78	10.00	35.22	56.00	20.78
	4985.0	22.16	22.24	25.21	30.00	4.79	10.00	35.21	56.00	20.79
256-QAM	4945.0	22.62	22.64	25.64	30.00	4.36	10.00	35.64	56.00	20.36
	4965.0	22.31	22.11	25.22	30.00	4.78	10.00	35.22	56.00	20.78
	4985.0	22.18	22.25	25.23	30.00	4.77	10.00	35.23	56.00	20.77

Table 7: 4.9 GHz: RF Power & EIRP: 10 MHz channel & 19 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4945.0	22.59	22.77	25.69	30.00	4.31	19.00	44.69	56.00	11.31
	4965.0	22.22	22.20	25.22	30.00	4.78	19.00	44.22	56.00	11.78
	4985.0	22.16	22.24	25.21	30.00	4.79	19.00	44.21	56.00	11.79
256-QAM	4945.0	22.62	22.64	25.64	30.00	4.36	19.00	44.64	56.00	11.36
	4965.0	22.31	22.11	25.22	30.00	4.78	19.00	44.22	56.00	11.78
	4985.0	22.18	22.25	25.23	30.00	4.77	19.00	44.23	56.00	11.77

Table 8: 4.9 GHz: RF Power & EIRP: 10 MHz channel & 24 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4945.0	22.59	22.77	25.69	30.00	4.31	24.00	49.69	56.00	6.31
	4965.0	22.22	22.20	25.22	30.00	4.78	24.00	49.22	56.00	6.78
	4985.0	22.16	22.24	25.21	30.00	4.79	24.00	49.21	56.00	6.79
256-QAM	4945.0	22.62	22.64	25.64	30.00	4.36	24.00	49.64	56.00	6.36
	4965.0	22.31	22.11	25.22	30.00	4.78	24.00	49.22	56.00	6.78
	4985.0	22.18	22.25	25.23	30.00	4.77	24.00	49.23	56.00	6.77

Table 9: 4.9 GHz: RF Power & EIRP: 10 MHz channel & 32 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4945.0	20.63	19.85	23.27	24.00	0.73	32.00	55.27	56.00	0.73
	4965.0	20.44	20.48	23.47	24.00	0.53	32.00	55.47	56.00	0.53
	4985.0	20.46	20.77	23.63	24.00	0.37	32.00	55.63	56.00	0.37
256-QAM	4945.0	20.59	19.85	23.25	24.00	0.75	32.00	55.25	56.00	0.75
	4965.0	20.51	20.51	23.52	24.00	0.48	32.00	55.52	56.00	0.48
	4985.0	20.38	20.71	23.56	24.00	0.44	32.00	55.56	56.00	0.44

Table 10: 4.9 GHz: RF Power & EIRP: 20 MHz channel & 10 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4950.0	22.78	23.07	25.94	33.00	7.06	10.00	35.94	59.00	23.06
	4965.0	22.44	22.67	25.57	33.00	7.43	10.00	35.57	59.00	23.43
	4980.0	22.53	22.59	25.57	33.00	7.43	10.00	35.57	59.00	23.43
256-QAM	4950.0	22.73	22.99	25.87	33.00	7.13	10.00	35.87	59.00	23.13
	4965.0	22.42	22.66	25.55	33.00	7.45	10.00	35.55	59.00	23.45
	4980.0	22.61	22.57	25.60	33.00	7.40	10.00	35.60	59.00	23.40

Table 11: 4.9 GHz: RF Power & EIRP: 20 MHz channel & 19 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4950.0	22.78	23.07	25.94	33.00	7.06	19.00	44.94	59.00	14.06
	4965.0	22.44	22.67	25.57	33.00	7.43	19.00	44.57	59.00	14.43
	4980.0	22.53	22.59	25.57	33.00	7.43	19.00	44.57	59.00	14.43
256-QAM	4950.0	22.73	22.99	25.87	33.00	7.13	19.00	44.87	59.00	14.13
	4965.0	22.42	22.66	25.55	33.00	7.45	19.00	44.55	59.00	14.45
	4980.0	22.61	22.57	25.60	33.00	7.40	19.00	44.60	59.00	14.40

Table 12: 4.9 GHz: RF Power & EIRP: 20 MHz channel & 24 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4950.0	22.78	23.07	25.94	33.00	7.06	24.00	49.94	59.00	9.06
	4965.0	22.44	22.67	25.57	33.00	7.43	24.00	49.57	59.00	9.43
	4980.0	22.53	22.59	25.57	33.00	7.43	24.00	49.57	59.00	9.43
256-QAM	4950.0	22.73	22.99	25.87	33.00	7.13	24.00	49.87	59.00	9.13
	4965.0	22.42	22.66	25.55	33.00	7.45	24.00	49.55	59.00	9.45
	4980.0	22.61	22.57	25.60	33.00	7.40	24.00	49.60	59.00	9.40

Table 13: 4.9 GHz: RF Power & EIRP: 20 MHz channel & 32 dBi antenna

Modulation	Frequency (MHz)	Antena 1 power (dBm)	Antena 2 power (dBm)	Combined power (dBm)	Output power limit (dBm)	Output power margin (dB)	Antenna gain (dBi)	EIRP (dBm)	EIRP limit (dBm)	EIRP margin (dB)
BPSK	4950.0	22.78	23.07	25.94	27.00	1.06	32.00	57.94	59.00	1.06
	4965.0	22.44	22.67	25.57	27.00	1.43	32.00	57.57	59.00	1.43
	4980.0	22.53	22.59	25.57	27.00	1.43	32.00	57.57	59.00	1.43
256-QAM	4950.0	22.73	22.99	25.87	27.00	1.13	32.00	57.87	59.00	1.13
	4965.0	22.42	22.66	25.55	27.00	1.45	32.00	57.55	59.00	1.45
	4980.0	22.61	22.57	25.60	27.00	1.40	32.00	57.60	59.00	1.40

5.2 GHz: FCC 47 CFR Part 15 Subpart E, §15.407

Table 14: 5.2 GHz: RF Power & EIRP: 5 MHz channel 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5155.0	9.81	9.96	12.90	26.70	13.80	9.30	22.20	36.00	13.80
	5200.0	16.11	16.22	19.18	26.70	7.52	9.30	28.48	36.00	7.52
	5247.5	15.82	15.77	18.81	26.70	7.89	9.30	28.11	36.00	7.89
256-QAM	5155.0	9.79	9.82	12.82	26.70	13.88	9.30	22.12	36.00	13.88
	5200.0	16.01	16.15	19.09	26.70	7.61	9.30	28.39	36.00	7.61
	5247.5	15.82	15.73	18.79	26.70	7.91	9.30	28.09	36.00	7.91

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 15: 5.2 GHz: RF Power & EIRP: 5 MHz channel 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5155.0	0.41	0.61	3.52	12.70	9.18	23.30	26.82	36.00	9.18
	5200.0	0.51	0.43	3.48	12.70	9.22	23.30	26.78	36.00	9.22
	5247.5	0.36	0.44	3.41	12.70	9.29	23.30	26.71	36.00	9.29
256-QAM	5155.0	0.46	0.59	3.54	12.70	9.16	23.30	26.84	36.00	9.16
	5200.0	0.59	0.39	3.50	12.70	9.20	23.30	26.80	36.00	9.20
	5247.5	0.41	0.42	3.43	12.70	9.27	23.30	26.73	36.00	9.27

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 16: 5.2 GHz: RF Power & EIRP: 5 MHz channel 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5155.0	-7.12	-7.22	-4.16	4.70	8.86	31.30	27.14	36.00	8.86
	5200.0	-7.31	-7.55	-4.42	4.70	9.12	31.30	26.88	36.00	9.12
	5247.5	-7.43	-7.62	-4.51	4.70	9.21	31.30	26.79	36.00	9.21
256-QAM	5155.0	-7.23	-7.51	-4.36	4.70	9.06	31.30	26.94	36.00	9.06
	5200.0	-7.35	-7.65	-4.49	4.70	9.19	31.30	26.81	36.00	9.19
	5247.5	-7.42	-7.66	-4.53	4.70	9.23	31.30	26.77	36.00	9.23

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 17: 5.2 GHz: RF Power & EIRP: 10 MHz channel 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5160	16.87	16.92	19.91	26.70	6.79	9.30	29.21	36.00	6.79
	5200	16.89	16.87	19.89	26.70	6.81	9.30	29.19	36.00	6.81
	5245	16.59	16.62	19.62	26.70	7.08	9.30	28.92	36.00	7.08
256-QAM	5160	16.84	16.89	19.88	26.70	6.82	9.30	29.18	36.00	6.82
	5200	16.88	16.75	19.83	26.70	6.87	9.30	29.13	36.00	6.87
	5245	16.61	16.71	19.67	26.70	7.03	9.30	28.97	36.00	7.03
Note: Total antenna gain includes 0.7 dB loss of the cable										

Table 18: 5.2 GHz: RF Power & EIRP: 10 MHz channel 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5160	3.35	3.33	6.35	12.70	6.35	23.30	29.65	36.00	6.35
	5200	3.51	3.51	6.52	12.70	6.18	23.30	29.82	36.00	6.18
	5245	3.22	3.40	6.32	12.70	6.38	23.30	29.62	36.00	6.38
256-QAM	5160	3.61	3.55	6.59	12.70	6.11	23.30	29.89	36.00	6.11
	5200	3.58	3.61	6.61	12.70	6.09	23.30	29.91	36.00	6.09
	5245	3.18	3.22	6.21	12.70	6.49	23.30	29.51	36.00	6.49
Note: Total antenna gain includes 0.7 dB loss of the cable										

Table 19: 5.2 GHz: RF Power & EIRP: 10 MHz channel 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5160	-4.64	-4.58	-1.60	4.70	6.30	31.30	29.70	36.00	6.30
	5200	-4.72	-4.69	-1.69	4.70	6.39	31.30	29.61	36.00	6.39
	5245	-4.81	-4.77	-1.78	4.70	6.48	31.30	29.52	36.00	6.48
256-QAM	5160	-4.42	-4.45	-1.42	4.70	6.12	31.30	29.88	36.00	6.12
	5200	-4.62	-4.56	-1.58	4.70	6.28	31.30	29.72	36.00	6.28
	5245	-4.73	-4.55	-1.63	4.70	6.33	31.30	29.67	36.00	6.33
Note: Total antenna gain includes 0.7 dB loss of the cable										

Table 20: 5.2 GHz: RF Power & EIRP: 20 MHz channel 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5170	18.22	18.17	21.21	26.70	5.49	9.30	30.51	36.00	5.49
	5200	20.14	20.18	23.17	26.70	3.53	9.30	32.47	36.00	3.53
	5240	19.81	19.97	22.90	26.70	3.80	9.30	32.20	36.00	3.80
256-QAM	5170	18.25	18.23	21.25	26.70	5.45	9.30	30.55	36.00	5.45
	5200	20.25	20.33	23.30	26.70	3.40	9.30	32.60	36.00	3.40
	5240	19.83	19.90	22.88	26.70	3.82	9.30	32.18	36.00	3.82
Note: Total antenna gain includes 0.7 dB loss of the cable										

Table 21: 5.2 GHz: RF Power & EIRP: 20 MHz channel 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5170	5.59	5.89	8.75	12.70	3.95	23.30	32.05	36.00	3.95
	5200	5.61	5.67	8.65	12.70	4.05	23.30	31.95	36.00	4.05
	5240	5.32	5.44	8.39	12.70	4.31	23.30	31.69	36.00	4.31
256-QAM	5170	5.55	5.87	8.72	12.70	3.98	23.30	32.02	36.00	3.98
	5200	5.63	5.62	8.64	12.70	4.06	23.30	31.94	36.00	4.06
	5240	5.35	5.46	8.42	12.70	4.28	23.30	31.72	36.00	4.28
Note: Total antenna gain includes 0.7 dB loss of the cable										

Table 22: 5.2 GHz: RF Power & EIRP: 20 MHz channel 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5170	-2.42	-2.15	0.73	4.70	3.97	31.30	32.03	36.00	3.97
	5200	-2.59	-2.33	0.55	4.70	4.15	31.30	31.85	36.00	4.15
	5240	-2.91	-2.60	0.26	4.70	4.44	31.30	31.56	36.00	4.44
256-QAM	5170	-2.51	-2.21	0.65	4.70	4.05	31.30	31.95	36.00	4.05
	5200	-2.55	-2.36	0.56	4.70	4.14	31.30	31.86	36.00	4.14
	5240	-2.89	-2.58	0.28	4.70	4.42	31.30	31.58	36.00	4.42
Note: Total antenna gain includes 0.7 dB loss of the cable										

5.8 GHz: FCC Part 15 Subpart E and RSS-247 Issue 1

Table 23: 5.8 GHz: RF Power & EIRP: 5 MHz channel, PMP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	23.12	23.32	26.23	26.70	0.47	9.30	35.53	36.00	0.47
	5790.00	22.10	22.35	25.24	26.70	1.46	9.30	34.54	36.00	1.46
	5847.50	22.70	22.81	25.77	26.70	0.93	9.30	35.07	36.00	0.93
256-QAM	5727.50	23.30	23.55	26.44	26.70	0.26	9.30	35.74	36.00	0.26
	5790.00	22.11	22.60	25.37	26.70	1.33	9.30	34.67	36.00	1.33
	5847.50	22.71	22.99	25.86	26.70	0.84	9.30	35.16	36.00	0.84

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 24: 5.8 GHz: RF Power & EIRP: 5 MHz channel, PMP 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	9.04	9.22	12.14	12.70	0.56	23.30	35.44	36.00	0.56
	5790.00	8.07	8.33	11.21	12.70	1.49	23.30	34.51	36.00	1.49
	5847.50	8.78	8.92	11.86	12.70	0.84	23.30	35.16	36.00	0.84
256-QAM	5727.50	9.08	9.23	12.17	12.70	0.53	23.30	35.47	36.00	0.53
	5790.00	8.08	8.22	11.16	12.70	1.54	23.30	34.46	36.00	1.54
	5847.50	8.82	8.98	11.91	12.70	0.79	23.30	35.21	36.00	0.79

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 25: 5.8 GHz: RF Power & EIRP: 5 MHz channel, PMP 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	0.72	0.82	3.78	4.70	0.92	31.30	35.08	36.00	0.92
	5790.00	-0.13	0.03	2.96	4.70	1.74	31.30	34.26	36.00	1.74
	5847.50	0.74	0.88	3.82	4.70	0.88	31.30	35.12	36.00	0.88
256-QAM	5727.50	0.73	0.82	3.79	4.70	0.91	31.30	35.09	36.00	0.91
	5790.00	-0.15	0.02	2.95	4.70	1.75	31.30	34.25	36.00	1.75
	5847.50	0.77	0.81	3.80	4.70	0.90	31.30	35.10	36.00	0.90

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 26: 5.8 GHz: RF Power & EIRP: 10 MHz channel, PMP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5730	23.22	23.32	26.28	26.7	0.42	9.3	35.58	36.00	0.42
	5790	22.75	22.87	25.82	26.7	0.88	9.3	35.12	36.00	0.88
	5845	22.20	22.21	25.22	26.7	1.48	9.3	34.52	36.00	1.48
256-QAM	5730	23.21	23.29	26.26	26.7	0.44	9.3	35.56	36.00	0.44
	5790	22.75	22.72	25.75	26.7	0.95	9.3	35.05	36.00	0.95
	5845	22.24	22.23	25.25	26.7	1.45	9.3	34.55	36.00	1.45

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 27: 5.8 GHz: RF Power & EIRP: 10 MHz channel, PMP 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5730.00	9.05	9.18	12.13	12.70	0.57	23.30	35.43	36.00	0.57
	5790.00	8.41	8.62	11.53	12.70	1.17	23.30	34.83	36.00	1.17
	5845.00	8.27	8.41	11.35	12.70	1.35	23.30	34.65	36.00	1.35
256-QAM	5730.00	9.05	9.16	12.12	12.70	0.58	23.30	35.42	36.00	0.58
	5790.00	8.40	8.65	11.54	12.70	1.16	23.30	34.84	36.00	1.16
	5845.00	8.22	8.44	11.34	12.70	1.36	23.30	34.64	36.00	1.36

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 28: 5.8 GHz: RF Power & EIRP: 10 MHz channel, PMP 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5730.00	0.66	0.66	3.67	4.70	1.03	31.30	34.97	36.00	1.03
	5790.00	0.22	0.31	3.28	4.70	1.42	31.30	34.58	36.00	1.42
	5845.00	-0.02	-0.03	2.99	4.70	1.71	31.30	34.29	36.00	1.71
256-QAM	5730.00	0.66	0.76	3.72	4.70	0.98	31.30	35.02	36.00	0.98
	5790.00	0.23	0.44	3.35	4.70	1.35	31.30	34.65	36.00	1.35
	5845.00	-0.03	0.10	3.05	4.70	1.65	31.30	34.35	36.00	1.65

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 29: 5.8 GHz: RF Power & EIRP: 20 MHz channel, PMP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	23.42	23.55	26.50	26.70	0.20	9.30	35.80	36.00	0.20
	5790.00	22.84	22.96	25.91	26.70	0.79	9.30	35.21	36.00	0.79
	5840.00	22.56	22.86	25.72	26.70	0.98	9.30	35.02	36.00	0.98
256-QAM	5735.00	23.41	23.64	26.54	26.70	0.16	9.30	35.84	36.00	0.16
	5790.00	22.75	23.95	26.40	26.70	0.30	9.30	35.70	36.00	0.30
	5840.00	22.65	22.82	25.75	26.70	0.95	9.30	35.05	36.00	0.95

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 30: 5.8 GHz: RF Power & EIRP: 20 MHz channel, PMP 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	9.08	9.19	12.15	12.70	0.55	23.30	35.45	36.00	0.55
	5790.00	8.60	8.77	11.70	12.70	1.00	23.30	35.00	36.00	1.00
	5840.00	8.45	8.92	11.70	12.70	1.00	23.30	35.00	36.00	1.00
256-QAM	5735.00	9.11	9.18	12.16	12.70	0.54	23.30	35.46	36.00	0.54
	5790.00	8.65	8.75	11.71	12.70	0.99	23.30	35.01	36.00	0.99
	5840.00	8.45	8.92	11.70	12.70	1.00	23.30	35.00	36.00	1.00

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 31: 5.8 GHz: RF Power & EIRP: 20 MHz channel, PMP 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB	Tot. Gain, dBi	EIRP, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	0.84	0.99	3.93	4.70	0.77	31.30	35.23	36.00	0.77
	5790.00	0.30	0.55	3.44	4.70	1.26	31.30	34.74	36.00	1.26
	5840.00	0.26	0.54	3.41	4.70	1.29	31.30	34.71	36.00	1.29
256-QAM	5735.00	0.86	0.98	3.93	4.70	0.77	31.30	35.23	36.00	0.77
	5790.00	0.31	0.56	3.45	4.70	1.25	31.30	34.75	36.00	1.25
	5840.00	0.27	0.56	3.43	4.70	1.27	31.30	34.73	36.00	1.27

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 32: 5.8 GHz: RF Power & EIRP: 5 MHz channel and PTP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	23.12	23.32	26.23	30.00	3.77
	5790.00	22.10	22.35	25.24	30.00	4.76
	5847.50	22.70	22.81	25.77	30.00	4.23
256-QAM	5727.50	23.30	23.55	26.44	30.00	3.56
	5790.00	22.11	22.60	25.37	30.00	4.63
	5847.50	22.71	22.99	25.86	30.00	4.14

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 33: 5.8 GHz: RF Power & EIRP: 5 MHz channel and PTP 24 dBi antenna

Modulation and data rate	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	9.04	9.22	12.14	30.00	17.86
	5790.00	22.10	22.35	25.24	30.00	4.76
	5847.50	8.78	8.92	11.86	30.00	18.14
256-QAM	5727.50	9.08	9.23	12.17	30.00	17.83
	5790.00	22.11	22.60	25.37	30.00	4.63
	5847.50	8.82	8.98	11.91	30.00	18.09

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 34: 5.8 GHz: RF Power & EIRP: 5 MHz channel and PTP 32 dBi antenna

Modulation and data rate	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5727.50	0.72	0.82	3.78	30.00	26.22
	5790.00	19.94	19.95	22.96	30.00	7.04
	5847.50	0.74	0.88	3.82	30.00	26.18
256-QAM	5727.50	0.73	0.82	3.79	30.00	26.21
	5790.00	19.87	20.03	22.96	30.00	7.04
	5847.50	0.77	0.81	3.80	30.00	26.20

Note: Total antenna gain includes 0.7 dB loss of the cable

Table 35: 5.8 GHz: RF Power & EIRP: 10 MHz channel PTP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5730.00	23.22	23.32	26.28	30.00	3.72
	5790.00	22.75	22.87	25.82	30.00	4.18
	5845.00	22.20	22.21	25.22	30.00	4.78
256-QAM	5730.00	23.21	23.29	26.26	30.00	3.74
	5790.00	22.75	22.72	25.75	30.00	4.25
	5845.00	22.24	22.23	25.25	30.00	4.75

Table 36: 5.8 GHz: RF Power & EIRP: 10 MHz channel PTP 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5730.00	9.05	9.18	12.13	30.00	17.87
	5790.00	22.75	22.87	25.82	30.00	4.18
	5845.00	8.27	8.41	11.35	30.00	18.65
256-QAM	5730.00	9.05	9.16	12.12	30.00	17.88
	5790.00	22.75	22.72	25.75	30.00	4.25
	5845.00	8.22	8.44	11.34	30.00	18.66

Table 37: 5.8 GHz: RF Power & EIRP: 10 MHz channel and PTP 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5730.00	0.66	0.66	3.67	30.00	26.33
	5790.00	20.65	20.65	23.66	30.00	6.34
	5845.00	-0.02	-0.03	2.99	30.00	27.01
256-QAM	5730.00	0.66	0.76	3.72	30.00	26.28
	5790.00	20.71	20.86	23.80	30.00	6.20
	5845.00	-0.03	0.10	3.05	30.00	26.95

Table 38: 5.8 GHz: RF Power & EIRP: 20 MHz channel PTP 10 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	23.42	23.55	26.50	30.00	3.50
	5790.00	22.84	22.96	25.91	30.00	4.09
	5840.00	22.56	22.86	25.72	30.00	4.28
256-QAM	5735.00	23.41	23.64	26.54	30.00	3.46
	5790.00	22.75	23.95	26.40	30.00	3.60
	5840.00	22.65	22.82	25.75	30.00	4.25

Table 39: 5.8 GHz: RF Power & EIRP: 20 MHz channel PTP 24 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	9.08	9.19	12.15	30.00	17.85
	5790.00	22.84	22.96	25.91	30.00	4.09
	5840.00	8.45	8.92	11.70	30.00	18.30
256-QAM	5735.00	9.11	9.18	12.16	30.00	17.84
	5790.00	22.75	23.95	26.40	30.00	3.60
	5840.00	8.45	8.92	11.70	30.00	18.30

Table 40: 5.8 GHz: RF Power & EIRP: 20 MHz channel and PTP 32 dBi antenna

Modulation	Frequency, MHz	Output power on ch0, dBm	Output power on ch0, dBm	Combined power, dBm	Limit, dBm	Margin, dB
BPSK	5735.00	0.84	0.99	3.93	30.00	26.07
	5790.00	20.98	20.90	23.95	30.00	6.05
	5840.00	0.26	0.54	3.41	30.00	26.59
256-QAM	5735.00	0.86	0.98	3.93	30.00	26.07
	5790.00	20.96	20.98	23.98	30.00	6.02
	5840.00	0.27	0.56	3.43	30.00	26.57

5 Regulatory Notices

5.1.1 FCC Notices

Deployment in USA

The following notices about deployment in the USA are included in training and documentation provided to professional installers and operators of the final product:

1. The final product must be professionally installed.
2. WARNING -- FCC RF Exposure Warnings

   To satisfy FCC RF exposure requirements for RF transmitting devices, the following distances should be maintained between the antenna of this device and persons during device operation:

Table 41: FCC: RDL-3000-RMG3 Recommended Safe Distances

Frequency (MHz)	Deployment	Separation Distance
4900	PMP	270 cm (106.3") or more
5200	PMP	20 cm (7.8") or more
5800	PMP	20 cm (7.8") or more
5800	PTP	240 cm (94.5") or more

   To ensure compliance, operation at closer than these distances is not recommended. The antenna used for this transmitter must not be collocated in conjunction with any other antenna or transmitter.
3. FCC Information to Users @ FCC 15.105:

   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 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:

   - 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 radio/TV technician for help.

   Where DFS is required by regional regulations, this function is permanently enabled at the factory and can not be disabled by the installer or end-user.
4. FCC Information to Users @ FCC 15.19:

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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

5. FCC Information to Users @ FCC 15.21:

   Warning: Changes or modifications not expressly approved by Redline Communications could void the user's authority to operate the equipment.

5.1.2 Industry Canada Notices

Deployment in Canada

This Class B Digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment.

The following notices about deployment in Canada are included in training and documentation provided to professional installers and operators of the final product:

1. The final product must be professionally installed.
2. WARNING -- IC RF Exposure Warnings

   To satisfy IC RF exposure requirements for RF transmitting devices, the following distances should be maintained between the antenna of this device and persons during device operation:

Table 42: IC: RDL-3000-RMG3 Recommended Safe Distances

Frequency (MHz)	Deployment	Separation Distance
4900	PMP	270 cm (106.3") or more
5800	PMP	20 cm (7.8") or more
5800	PTP	240 cm (94.5") or more

To ensure compliance, operation at closer than these distances is not recommended. The antenna used for this transmitter must not be collocated in conjunction with any other antenna or transmitter.

The RDL-3000-RMG3 has been designed to operate with an antenna having a maximum gain of 32 dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

This device has been designed to ensure that radio frequency emissions are maintained within the band of operation under all normal operating conditions listed in this manual.

This device complies with Industry Canada license-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.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropic radiated power (EIRP) is not more than that required for successful communication.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Déploiement aux le Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Les avis suivants à propos du déploiement au Canada sont inclus dans la formation et la documentation fournies aux installateurs professionnels et les opérateurs du produit final:

1. Le produit final doit être installé par un professionnel.
2. AVERTISSEMENT - IC avertissements d'exposition RF

   Pour satisfaire les exigences d'IC en ce qui a trait aux expositions aux RF pour RF dispositifs de transmission, les distances suivantes doit être maintenue entre l'antenne de ce dispositif et des personnes pendant le fonctionnement du dispositif:

Table 43: IC: RDL-3000-RMG3 distances de sécurité recommandées

Frequency (MHz)	Deployment	Separation Distance
4900	PMP	270 cm (106.3") ou plus
5800	PMP	20 cm (7.8") ou plus
5800	PTP	240 cm (94.5") ou plus

Le RDL-3000-RMG3 a été conçu pour fonctionner avec une antenne ayant un gain maximal de 32 dBi. Antenne ayant un gain plus élevé est strictement interdite par les règlements d'Industrie Canada. L'impédance d'antenne requise est de 50 ohms.

Ce dispositif a été conçu pour veiller à ce que les émissions de radiofréquences sont maintenus dans la bande de fonctionnement dans toutes les conditions normales de fonctionnement figurant dans ce manuel.

Cet appareil est conforme la norme d'Industrie Canada exempts de licence RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Cet appareil ne peut pas causer d'interférences, et
2. Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Pour réduire le potentiel d'interférence radio sur d'autres utilisateurs, le type d'antenne et son gain doivent être choisies tel que la Puissance Isotrope Rayonnée Equivalente (PIRE) ne dépasse pas le niveau nécessaire pour une communication efficace.

De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 250-5 350 MHz et 5 650-5 850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

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