RF Exposure Warning

This transmitting equipment conforms to SAR (Specific Absorption Rate) limits regarding exposure of human beings to radio frequency electromagnetic energy, as defined in the following national and international standards and guidelines:

1. Industry Canada Radio Standards Specification 102 (RSS-102), *Evaluation Procedure for Mobile and Portable Radio Transmitters with respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields*;

2. Health Canada Safety Code 6, *Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz* [1];

3. United States Federal Communications Commission, Code of Federal Regulations; 47 CFR Part 1, § 1.1310 *Radiofrequency radiation exposure limits*; and

4. American National Standards Institute (ANSI) criteria for localized SAR in Section 4.2 of "*IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz"*[2].

Notes:

A. The SAR limit for uncontrolled exposure of persons not classed as RF and microwave exposed workers (including the general public) for transmitter equipment operating below 10 GHz, as defined in the references above, is **2 W/m^2** (0.2 mW/cm^2).

B. This transmitting equipment is designed for use with an outdoor antenna with a characteristic antenna gain of **10 dBi**, typically mounted at a significant height above ground to provide for adequate signal coverage. To ensure that the general public is not exposed to a power density above the recommended limit of 2 W/m^2 (0.2 mW/cm^2), the equipment must be installed such that the following minimum safe distances from the antenna are maintained:

10.0 m (32.8 ft)	when configured with	250 W PA
6.3 m (20.7 ft)	when configured with	100 W PA
1.1 m (3.6 ft)	standalone (i.e. no PA)	3 W TX

C. The following power density formula has been utilized in determining minimum safe distances:

$$S = \frac{PG}{4\pi R^2}$$

where: S = Power density (in appropriate units, e.g. W/m^2)
P = Power input to the Antenna (in appropriate units, e.g., W)
G = Power gain of the antenna in the direction of interest relative to an isotropic radiator
R = Distance to the center of radiation of the antenna (appropriate units, e.g., m)

[1] Minister of Public Works and Government Services, Canada 1999, Cat. H46- 2/ 99- 237E, ISBN 0- 662- 28032- 6

[2] ANSI/IEEE C95.1–1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017