

15 FCC RULES AND REGULATIONS PART 1.1307, 1.1310, 2.1091, 2.1093: RF EXPOSURES COMPLIANCE

15.1 SUGGESTED GRANT NOTES:

200 mW Outdoor unit RP:

The antenna(e) (including any radiating structure) used for this outdoor transmitter is to be fixed-mounted on outdoor permanent structures providing a separation distance of at 2.0 cm from all persons during normal operation. The maximum radiated output power at each antenna must satisfy the MPE categorical exclusion requirements per Part 2.1091. RF exposure compliance may need to be addressed at the time of licensing, as required by the responsible FCC Bureau(s), including antenna co-location requirements of 1.1307(b)(3).

15.2 SAFETY INFORMATION:

15.2.1 Installer and User WARNING

The following instructions will be placed in the user manual instructing installers and users to maintain the MPE distances (or Radii) during normal operation of the transmitter.

The device is to be installed and operated at a "fixed location". The term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location.

It must be located on the roof top site, pole, building, or traffic light away from users or bystanders. It must be mounted in a manner to ensure that a minimum separation distance of 20cm is normally maintained between all users, bystanders and the antenna (including any radiating structure).

The installer may be required to perform an MPE evaluation and an Environmental Assessment (EA) of the location at the time of licensing per CFR 47 Part 1.1307. Fixed mounted antennae that are colocated with other antennae must satisfy the co-location requirements of Part 1.1307.

15.2.2 Limits:

The limit for general population/uncontrolled environment exposures is $1 \text{ } mW \text{ } / cm^2$ for the band 1895-1910 MHz.

15.2.3 MPE evaluation:

The following calculations are provided for the more restrictive limit: uncontrolled environment/general population.

The calculated minimum safe distance, Radii(cm), is approximately 10 times lower than the minimum required installation distance of 20 cm per Part 2.1091.

Therefore, the transmitter UTS- EA7T56B complies with the MPE requirements by providing a safe separation distance between the antenna (including any radiating structure) and any persons.

The calculations were performed using formulas found in OET Bulletin 65 Edition 97-01(1997).



15.3 TRANSMITTER SPECIFICATIONS:

Antenna Type	Gain	Output Power	Duty Cycle (%)	Base stations M/N	Minimum
	(dBi)	average			Installation
		(dBm)			Distance
					(cm)
Omni-Directional	7	21.9 dBm (154 mW)	12.5	UTS- EA7T56B	20

15.4 MPE RADIUS FOR GENERAL POPULATION/UNCONTROLLED ENVIRONMENT

Power P(W) Max. average	Antenna Numeric G	Radius(cm)	Base stations M/N
0.154	5.0 (7 dBi)	7.8	UTS- EA7T56B