

MPE Calculation

Applicant : Gogo

Type of Equipment : Air-to-Ground Transceiver

Model No. : ATGB

FCC ID : WPX-ATGB

RF Exposure Calculations:

FCC 2.1091

The following information provides the minimum separation distance for the highest gain antenna provided with the as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 0.6mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = \text{EIRP} / (4 * \pi * D^2)$$

Power ERP W:	12	Power ERP dBm:	40.79181
Power EIRP mW:	19687.08	Power EIRP dBm:	42.94181
Distance cm:	52		
S = Power Density mW/cm ² :	0.579675		

This above assumes worst case output power of 12W ERP. The minimum separation distance that must be maintained between bystanders and the antenna must be 52cm. Because of the location of the antenna that distance will be easily maintained at all times.