



# Minimum Safe Distance From Antennas

## Based upon FCC OET Bulletin 65 and other FCC Sources

### INPUT DATA

Frequency MHz	1850
Pout Watts	1.2250
Duty Cycle Percent	100.0%
Ant. Gain dBi	6.12
Coax Loss dB	4.00

### RESULTS OF CALCULATIONS

Min. Distance Inches	4.96
Min. Distance Centimeters	12.60
ERP (Watts)	1.2170
EIRP (Watts)	1.9959

### REFERENCE DATA

Antenna Gain (non-log)	4.09
Coax loss (non-log)	0.40
Calculated limit (mw/cm <sup>2</sup> )	1.00
FCC Limit (mw/cm <sup>2</sup> )	1.00

### NOTES:

- (1) Valid only between 300 MHz - 100,000 MHz.
- (2) Calculations are sufficient for determining antenna safe distance for mobile antennas provided that calculated ERP < 1.5 watts for frequencies equal to or below 1.5 GHz, and calculated ERP < 3 watts for frequencies above 1.5 GHz.
- (3) Mobile antenna distances shall be no less than 8 inches.
- (4) There are no predefined ERP and distance limitations for fixed outside (building) antennas (see #5).
- (5) Indoor building antenna criteria is the same as the criteria for mobile antennas (see #2 & #3).
- (6) Mobile/portable stations are limited to 2 watts EIRP peak power in the 1900 MHz band (see 24.232[c]).

### SUMMARY

For Amplifier Model Number:	271220
Frequency Band (MHz)	1900
Mobile or Fixed?	Mobile
Outside or Inside Antenna?	Outside
Antenna Type:	Any antenna whose gain less cable loss does not exceed 2.1 dBi.
Safe Distance (inches):	8
Signature:	
Date:	4/17/2009