

Minimum Safe Distance From Antennas Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	869
Pout Watts	0.95500
Duty Cycle Percent	100.0%
Ant. Gain dBi	4.40
Cable and Connector Losses dB	0.30

RESULTS OF CALCULATIONS

Ant. Gain less Losses dBi	4.10
Min. Distance Inches	7.23
Min. Distance Centimeters	18.36
ERP (Watts)	1.4968
EIRP (Watts)	2.4547

REFERENCE DATA

Pout dBm	29.80
Antenna Gain (non-log)	2.75
Coax loss (non-log)	0.93
FCC Limit (mw/cm ²)	f/1500
Calculated limit (mw/cm ²)	0.58

NOTES:

- (1) Valid only between 300 MHz 100,000 MHz.
- (2) Calculations are sufficient for determining antenna safe distance for <u>mobile</u> antennas and <u>fixed inside</u> 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 and fixed indoor antenna distances shall be no less than 8 inches.
- (4) There are no predefined ERP and distance limitations for fixed outside (building) antennas.
- (5) Mobile/portable stations are limited to 2 watts EIRP peak power in the 1900 MHz band per FCC rules §24.232(c).
- (6) Fixed/Mobile/Portable stations are limited to 1 watt EIRP in 1710-1755 MHz band per FCC rules §27.50(d)(4).

SUMMARY FOR PUBLICATION

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For Amplifier Model Number:	277180
Frequency Band (MHz)	800 MHz
Mobile or Fixed?	Fixed
Outside or Inside Antenna?	Inside
Antenna Type:	Any antenna whose gain less cable and connector losess does not exceed 4.1 dBi.
Safe Distance (inches):	8 inches
Signature:	What M. Xhim
Date:	December 21, 2011

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