

1 FCC Rules and Regulations Part 1.1307, 1.1310, 2.1091, 2.1093: RF EXPOSURES

The manufacturer applies for the General Population/Uncontrolled Exposure Environment.

The maximum distance, from the antenna at which MPE is met or exceeded, is calculated from the equation relating field strength E in V/m, transmit power P in Watts, transmit antenna numeric gain G, and separation distance in meters:

$$E(V / m) = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power density: } P_d (mW / cm^2) = \frac{E^2}{3770}$$

The limit for general population/uncontrolled exposure environment applicable to Bystanders (at 462.5625MHz) = f(MHz)/1500 in mW / cm^2

2 MPE Calculation

Antenna: 0 dBd, Vertically polarized

Frequency^A 462.5625MHz

Limit for General Population/Uncontrolled Environment (Bystanders): 0.31 mW / cm^2

SEPARATION DISTANCE:

A minimum separation distance of 20cm is normally maintained between all users, bystanders and the antenna (including any radiating structure) during normal operation of this device.

Power ^B	(dBi) Antenna Gain	
	2.15	
(Watt)	(in)	(cm)
0.4	5	13

Notes:

^A = Distances are calculated for the largest (worst-case) separation distance

^B = Conducted Output Average Power delivered to the antenna

CONCLUSION:

The device complies with the MPE requirements by providing a safe separation distance between the antenna (including any radiating structure) and any persons.