

§ 1.1310 Radiofrequency radiation exposure limits

FCC ID: WRH-PRT01

Conducted Power (dBm):	12.9		19 millIWatts
Maximum Antenna Gain (dBi):	2.1		
Minimum TX Cable Loss (dB):			
Minimum TX Jumpers and Adapter Loss(dB):			
EIRP (dBm):	15.0	or	31 millIWatts
At frequency (MHz):	907.4		

General MPE Limit (mW/cm^2):	0.605
Occupational MPE Limit (mW/cm^2):	3.025

Given the following equation
Equation 1:

$$P_d = \frac{P_t G_t}{4\pi r^2}$$

Solve for r:
Equation 2:

$$r = \sqrt{\frac{P_t G_t}{4\pi P_d}}$$

Using Equation 1, the power density at 20 cm is:	0.01 mW/cm^2	
Margin	-19.86 dB	negative number is below the limit

General Results:			
Using Equation 2, the MPE limit is met at:	2.0 cm	or	0.02 meters
Occupational Results:			
Using Equation 2, the MPE limit is met at:	0.9 cm	or	0.00 meters

To comply with Maximum Permissible Exposure (MPE) requirements, the maximum composite output from the antenna cannot exceed 1000 Watts EIRP (2000 Watts EIRP for rural areas) and the antenna must be permanently installed in a fixed location that provides at least 0.02 meters of separation from all persons.