

General population/uncontrolled exposure MPE calculation

MPE Calculator DMP 1140 Series Key Fob Test 060714
 MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.
 dBi = dB gain compared to an isotropic radiator.
 S = power density in mW/cm²

Antenna Gain (dBi) **1**
 dBd + 2.17 = dBi dBi to dBd **2.17**
 Tx Frequency (MHz) **914** Output Power (Watts) **0.0006** Antenna Gain (dBd) **-1.17**
 Cable Loss (dB) **0.0** (dBm) **-2.22** Antenna minus cable (dBi) **1.00**

Calculated ERP (mw) 0.458 EIRP = Po(dBm) + Gain (dB)
 Calculated EIRP (mw) 0.755 Radiated (EIRP) dBm **-1.218**
 ERP = EIRP - 2.17 dB
 Radiated (ERP) dBm **-3.388**

Occupational Limit
3.04667 mW/cm²
 Power density (S)
 EIRP
 ----- = mW/cm²
 $4 \pi r^2$
General Public Limit
0.60933 mW/cm²
 r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	f/300	f/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	3.04666667	0.60933333
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
0.755	50.00	19.69	0.00002
0.755	40.00	15.75	0.00004
0.755	30.00	11.81	0.00007
0.755	25.00	9.84	0.00010
0.755	20.00	7.87	0.00015
0.755	15.00	5.91	0.00027
0.755	14.00	5.51	0.00031
0.755	13.00	5.12	0.00036
0.755	12.00	4.72	0.00042
0.755	11.00	4.33	0.00050
0.755	10.00	3.94	0.00060
0.755	9.00	3.54	0.00074
0.755	8.00	3.15	0.00094
0.755	7.00	2.76	0.00123
0.755	6.00	2.36	0.00167
0.755	5.00	1.97	0.00240
0.755	4.00	1.57	0.00376
0.755	3.00	1.18	0.00668
0.755	2.00	0.79	0.01503
0.755	1.75	0.69	0.01963
0.755	1.50	0.59	0.02672
0.755	1.25	0.49	0.03847
0.755	1.00	0.39	0.06011
0.755	0.75	0.30	0.10686
0.755	0.50	0.20	0.24044

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	N/A	N/A
1,500-10,000	N/A	N/A

ROGERS LABS, INC.
 4405 W. 259th Terrace
 Louisburg, KS 66053
 Phone/Fax: (913) 837-3214

Digital Monitoring Products, Inc.
 MODEL: PC0098 Wireless
 Test #: 060714
 Test to: FCC Parts 2 and 15C
 FCC ID#: CCKPC0098