

MPE Calculation

$S = \text{EIRP} / (4R^2\pi)$
S = Maximum power density (mW/cm²)
P = Power input to the antenna (mW)
G = Numeric power gain of the antenna
R = Distance to the center of the radiation of the antenna
EIRP = Equivalent Isotropic Radiated Power(mW) (=P*G)

Frequency range (MHz)	Electric Field strength (V/m)	Magnetic field strength (A/m)	Power Density (mW/cm ²)	Averageing time (minutes)
0.3 ~ 1.34	614	1.63	*100	30
1.34 ~ 30	824 / f	2.19 / f	*180 / f ²	30
30 ~ 300	27.5	0.073	0.2	30
300 ~ 1,500			f / 1500	30
1,500 ~ 100,000			1	30

Model Name : **DGT12-01DC0**

FCC ID : **2A201-DGT12-01DC0**

Separation distance (R) : **20.0 cm**

Modulation	Frequency (MHz)	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance (P)		Antenna Gain (G)		Power Density (S)	Limit of Power Density (S)	Result
		(dBm)		(dBm)	(mW)	(dBi)	(numeric)	(mW/cm ²)	(mW/cm ²)	
RFID_5 kbps	902.2	13.81	± 1.00	14.81	30.27	2.71	1.87	0.0112	0.60	PASS
	915.0	13.77		14.77	29.99	2.71	1.87	0.0111	0.61	PASS
	927.8	13.70		14.70	29.51	2.71	1.87	0.0110	0.61	PASS
RFID_2.5 kbps	902.2	13.80	± 1.00	14.80	30.20	2.71	1.87	0.0112	0.60	PASS
	915.0	13.74		14.74	29.79	2.71	1.87	0.0111	0.61	PASS
	927.8	13.67		14.67	29.31	2.71	1.87	0.0109	0.61	PASS
RFID_1.25 kbps	902.2	13.81	± 1.00	14.81	30.27	2.71	1.87	0.0112	0.60	PASS
	915.0	13.75		14.75	29.85	2.71	1.87	0.0111	0.61	PASS
	927.8	13.69		14.69	29.44	2.71	1.87	0.0109	0.61	PASS

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.