

Product name: PLS62-W
 Manufacturer: TRIMBLE EUROPE BV
 FCC Id: **NZI-120271**

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2} \quad (formula \ 1)$$

$$PG = \frac{(Ed)^2}{30} \quad (formula \ 2)$$

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

PG = Effective Isotropic Radiated Power (EIRP)

E = Electric field measured at distance R distance

d = measurement distance

Transmitter n°1a (GSM: 850 MHz)

FCC ID: NZI-110610

Maximum peak output power at the antenna terminal: 25,97 (dBm)
 Maximum peak output power at the antenna terminal: 395,3666201 (mW)
 Antenna gain(typical): 5,15 (dBi)
 Maximum antenna gain: 3,273406949 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 824 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 0,549 (mW/cm^2)

Power density at prediction frequency: 0,257472 (mW/cm^2)

(formula 1)

Transmitter n°1b (GSM: 1900 MHz)

FCC ID: NZI-110610

Maximum peak output power at the antenna terminal: 22,97 (dBm)
 Maximum peak output power at the antenna terminal: 198,1527026 (mW)
 Antenna gain(typical): 2,15 (dBi)
 Maximum antenna gain: 1,640589773 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 1850 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 1 (mW/cm^2)

Power density at prediction frequency: 0,064674 (mW/cm^2)

(formula 1)

Transmitter n°2 (Bluetooth: 2402-2480 MHz)

FCC ID: Z64-WL18DBMOD

Maximum peak output power at the antenna terminal: 12,20 (dBm)
 Maximum peak output power at the antenna terminal: 16,59586907 (mW)
 Antenna gain(typical): 3,2 (dBi)
 Maximum antenna gain: 2,089296131 (numeric)
 Prediction distance: 20 (cm)
 Prediction frequency: 2402 (MHz)
 MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310): 1 (mW/cm^2)

Power density at prediction frequency: 0,006898 (mW/cm^2)

(formula 1)

Transmitter N°1a + Transmitter N°2 : $[Pd(1a)/LPd(1a)] + [Pd(2b)/LPd(2b)] = 0,48$
 Transmitter N°1b + Transmitter N°2 : $[Pd(1b)/LPd(1b)] + [Pd(2b)/LPd(2b)] = 0,07$

<1

<1