Product name: PHS8-P
Manufacturer: TRIMBLE EUROPE BV
FCC Id: **NZI-110610**

Prediction of MPE limit at a given distance

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

$$S = \frac{PG}{4\pi R^2} \quad \text{(formula 1)} \qquad PG = \frac{(Ed)^2}{30} \quad \text{(formula 2)}$$

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 = measurment distance

Transmitter n°1a (GSM: 850 MHz)
FCC ID: NZI-110610

Maximum peak output power at the antenna terminal:	30.49	(dBm)
Maximum peak output power at the antenna terminal:	1119.437883	(mW)
Antenna gain(typical):	3.92	(dBi)
Maximum antenna gain:	2.466039337	(numeric)
Prediction distance:	30	(cm)
Prediction frequency:	824.2	(MHz)
MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310):	0.549	(mW/cm^2)
Power density at prediction frequency:	0.244089	(mW/cm^2)	(formula 1)

Transmitter n°1b (GSM: 1900 MHz)
FCC ID: NZI-110610

Maximum peak output power at the antenna terminal:	27.29	(dBm)
Maximum peak output power at the antenna terminal:	535.7966575	(mW)
Antenna gain(typical):	2.51	(dBi)
Maximum antenna gain:	1.782378767	(numeric)
Prediction distance:	30	(cm)
Prediction frequency:	1850.2	(MHz)
MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310):	1	(mW/cm^2)
Power density at prediction frequency:	0.084440	(mW/cm^2)	(formula 1)

Transmitter n°2a (Wi-Fi: 2412-2462 MHz)
FCC ID: Z64-WL18DBMOD

Maximum peak output power at the antenna terminal:	17.50	(dBm)
Maximum peak output power at the antenna terminal:	56.23413252	(mW)
Antenna gain(typical):	3.2	(dBi)
Maximum antenna gain:	2.089296131	(numeric)
Prediction distance:	30	(cm)
Prediction frequency:	2412	(MHz)
MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310):	1	(mW/cm^2)
Power density at prediction frequency:	0.010388	(mW/cm^2)	(formula 1)

Transmitter n°2b (Wi-Fi: 5180-5825 MHz)
FCC ID: Z64-WL18DBMOD

Maximum peak output power at the antenna terminal:	19.50	(dBm)
Maximum peak output power at the antenna terminal:	89.12509381	(mW)
Antenna gain(typical):	4.5	(dBi)
Maximum antenna gain:	2.818382931	(numeric)
Prediction distance:	30	(cm)
Prediction frequency:	5150	(MHz)
MPE limit for uncontrolled exposure at prediction frequency (limit table FCC §1.1310):	1	(mW/cm^2)
Power density at prediction frequency:	0.022210	(mW/cm^2)	(formula 1)

Transmitter n°2c (Bluetooth: 2402-2480 MHz)
FCC ID: Z64-WL18DBMOD

Maximum peak output power at the antenna terminal:	12.50	(dBm)
Maximum peak output power at the antenna terminal:	17.7827941	(mW)
Antenna gain(typical):	3.2	(dBi)
Maximum antenna gain:	2.089296131	(numeric)
Prediction distance:	30	(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:	0.003285	(mW/cm^2)	(formula 1)

Transmitter N°1a + Transmitter N°2a :	[Pd(1a)/LPd(1a)] + [Pd(2a)/LPd(2a)] =	0.45	<1
Transmitter N°1a + Transmitter N°2b :	[Pd(1a)/LPd(1a)] + [Pd(2b)/LPd(2b)] =	0.47	<1
Transmitter N°1a + Transmitter N°2c :	[Pd(1a)/LPd(1a)] + [Pd(2c)/LPd(2c)] =	0.45	<1
Transmitter N°1b + Transmitter N°2a :	[Pd(1b)/LPd(1b)] + [Pd(2a)/LPd(2a)] =	0.09	<1
Transmitter N°1b + Transmitter N°2b :	[Pd(1b)/LPd(1b)] + [Pd(2b)/LPd(2b)] =	0.11	<1
Transmitter N°1b + Transmitter N°2c :	[Pd(1b)/LPd(1b)] + [Pd(2c)/LPd(2c)] =	0.09	<1