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

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

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:	33,80	(dBm)
Maximum peak output power at the antenna terminal:	2398,832919	(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:	0,523055	(mW/cm^2)	(formula 1)

Transmitter n°1b (GSM: 1900 MHz)

FCC ID: NZI-110610		
Maximum peak output power at the antenna terminal:	30,50	(dBm)
Maximum peak output power at the antenna terminal:	1122,018454	(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:	0,176827	(mW/cm^2)	(formula 1)

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

FCC ID: XF6-M15SB		
Maximum peak output power at the antenna terminal:	18,92	(dBm)
Maximum peak output power at the antenna terminal:	77,98301105	(mW)
Antenna gain(typical):	4,1	(dBi)
Maximum antenna gain:	2,570395783	(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:	0,017723	(mW/cm^2)	(formula 1)

Transmitter N°1a + Transmitter N°2 :	[Pd(1a)/LPd(1a)] + [Pd(2b)/LPd(2b)] = 0,97	<1
Transmitter N°1b + Transmitter N°2 :	[Pd(1b)/LPd(1b)] + [Pd(2b)/LPd(2b)] = 0,19	<1