

RF EXPOSURE REPORT

REPORT NO.: SA990805E04

BT-533, BTD-1M4, BT-583, BTD-Turbo,

MODEL NO.: BT-511, BTD-2K2

FCC ID: N2E-BT533

ACCORDING: FCC Guidelines for Human Exposure

IEEE C95.1

APPLICANT: Premier Communications Corporation

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ISSUED BY: Bureau Veritas Consumer Products Services

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No SAR Evaluation Required if power is below the following threshold:

Tunable	Range	
F(GHz) Low	F(GHz) High	60/f SAR Limitation (mW)
2.402	2.480	24.19

Maximum measured transmitter power:

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Pout Conducted (dBm)	Pout Conducted (mW)	Maximum Antenna Gain (dBi)	Pout EIRP (mW)
5.7	3.7	0	3.7

Threshold for no SAR evaluation is 24.19 mW Maximum TX Power is 3.7 mW Conducted and 3.7 mW EIRP

Conclusion: No SAR evaluation required since maximum Transmitter Pout (both conducted and EIRP) is below FCC threshold



BT and Walkie-Talkie collocation consideration

Normally the DUT (Bluetooth Dongle) works with a max 50% DF Walkie-Talkie. Below is how max allowable collocated power was calculated:

(1)

Channel	Output Power to	Power Density (mW/cm²)	Limit of
Frequency	Antenna (mW)		Power Density
(MHz)	(EIRP)		(mW/cm²)
450	1479.108	0.294	0.3

NOTE: Limit of power density = 450 (MHz) to 1500 = 0.3

(2)

Push-to-talk (PTT) devices

RF exposure is evaluated with a duty factor of 50% when the actual operating duty factor is \leq 50%.27 Devices supporting higher duty factors shall be evaluated at the maximum duty factor

(3) the max Bluetooth eirp output power is 4 mW.

According to (1)(2) and (3) The maximum allowable eirp output power for Walkie-Talkie should be less than (1479 mW x 2) - 4= 2954 mW

CONCLUSION:

Both of the BT and Walkie-Talkie can transmit simultaneously, the formula of calculated the collocated MPE is:

 $CPD_1/LPD_1 + CPD_2/LPD_2 + \dots etc. < 1$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is 0.294 / 0.3 + 0.001 / 1 = 0.982, which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.