RF EXPOSURE EVALUATION
FCC ID: 2ANYC-NT-1200

Product Name	:	barcode scanner
Model Name	:	NT-1200, NT-1202, NT-1202W, NT-1203, NT-1203L, NT-1205, NT-1205BT, NT-1208, NT-1209, NT-1900, NT-1920, NT-1950, NT-1970, NT-1980, NT-1990, NT-2023
Bluetooth Version	:	BT4.2 BDR and BLE
Operating frequency	:	2402-2480MHz 2407-2478MHz
Numbers of Channel	:	40 channels For DTS 79 channels for BDR 60 channels for SRD
Antenna Type	:	SRD 2.4GHz: Internal Antenna Bluetooth: PCB Antenna
Antenna Gain	:	SRD 2.4GHz: 2.66 dBi Bluetooth: 2.0 dBi
Type of Modulation	:	GFSK
Power supply	:	Input:120mA/3.7V Li-ion Battery : PL3070107 Rated Voltage: 3.7V Capacity: 3000mAh
Hardware Version	:	N/A
Software Version	:	N/A

Standard Requirement

According to § 15.247(i) and § 1.1307b(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See KDB 447498 D01 General RF Exposure Guidance v06, section 4. 3. 1.

The 1-g and 10-g SAR test exclusion thresholds for 100MHz to 6GHz at test separation distances ≤ 50mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]*[√f(GHz)] ≤3.0 for 1-g SAR and ≤7.5 for 10-g SAR extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison.

The test exclusions are applicable only when the minimum test separation distance is ≤ 50mm and for transmission frequencies between 100MHz and 6GHz. When the minimum test separation distance is <5mm, a distance of 5mm is applied to determine SAR test exclusion. Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to quality for TCB approval.

RF Output power

Freq. (MHz)	Field strength(max)(dBuV/m)	EIRP (max) (dBm)
2407	93.62	-1.58
Note: EIRP=E-104.8+20logD, Where E is the electric field strength in dBμV/m. EIRP is the equivalent isotropically radiated power in dBm. d is the specified measurement distance in m. where D=3, EIRP=E-95.2.		

Channel (MHz)	**Maximum output power (dBm)**	**Tune up tolerance (dBm)**	**Max Tune Up Power (mW)**	**Distance (mm)**	**Calculation results**	**Limit**	**Operating Mode**
2402	6.21	6.21±1	5.260173	5	1.630484	3	EDR
2402	0.92	0.92±1	1.555966	5	0.482299	3	BLE
2407	-1.58	-1.58±1	0.874984	5	0.271499	3	SRD

The sample support one 2.4G SRD modular and BT modular, they supports difference antenna, need consider simultaneous transmission：

Σ of (the highest measured or estimated SAR $_{EDR}$ +SAR$_{SRD}$)/1.6

=(1.630484/7.5+0.562041/7.5)/1.6=0.104123 < 1.0;

Signature

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Manager

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