

**Roambee Corporation**  
**3120 De La Cruz Blvd. Suite 121, Santa Clara,**  
**California 95054 United States**

Federal Communications Commission  
Authorization and Evaluation Division  
Equipment Authorization Branch  
7435 Oakland Mills Road  
Columbia, MD 21046

**Applicant's declaration concerning RF Radiation Exposure**

We hereby indicate that the product  
Product description: GPS Tracker  
Model No: RMBU\_2GTR

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the  
Product: GPS Tracker  
will be integrated in the user's manual to provide end-users with transmitter operating  
conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21703-16650-C-1,  
W6M21703-16650-P-2244 and the accompanying calculations.

Company: Roambee Corporation

Address: 3120 De La Cruz Blvd. Suite 121, Santa Clara, California 95054 United States

Date: 2017-03-14

**Signature**





# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21703-16650-C-1

FCC ID: 2ALG8RMBU2GTR

## 3.2 RF Exposure Compliance Requirements

FCC Rule: 15.247(b)(3)

Test exclusion = max. conducted output power

Test exclusion = -5.45 dBm

### RESULT:

Test standard : FCC KDB Publication  
447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:

SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The enclosure of the device provides  $\geq 0.5$  cm separation from the antenna elements to significant metal parts of the enclosure to minimize potential perturbations.

Frequency Band: 2400-2483.5 MHz

Maximum Power fed to Antenna: 0.2851 mW

Separation distances:

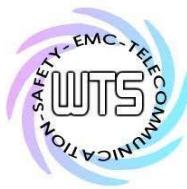
Radiator to user:  $> 5$  mm

Distance prescribed in user manual:  $> 5$  mm

MHz	5	10	15	20	25	mm
2450	10	19	29	38	48	SAR Test Exclusion Threshold (mW)

MHz	30	35	40	45	50	mm
2450	57	67	77	86	96	SAR Test Exclusion Threshold (mW)

MHz	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	mm
2450	96	196	296	396	496	596	696	796	896	996	1096	1196	1296	1396	1496	mW



# Worldwide Testing Services(Taiwan) Co., Ltd.

Report Number: W6M21703-16650-P-2224

FCC ID: 2ALG8RMBU2GTR

## **9 Maximum Permissible Exposure**

### **9.1 Applicable Standard**

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 limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### **9.2 MPE Calculation Method**

#### **(A) Limits for Occupational/Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

#### **(B) Limits for General Population/Uncontrolled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

$$E \text{ (V/m)} \cdot \frac{\sqrt{30 \times P \times G}}{d}$$

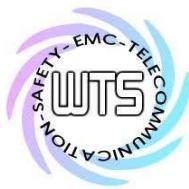
$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} \cdot \frac{E^2}{377}$$

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd \cdot \frac{30 \times P \times G}{377 \times d^2}$$



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Report Number: W6M21703-16650-P-2224

FCC ID: 2ALG8RMBU2GTR

Frequency	Max output power (dBm) / (W)	Antenna Gain	Power Density(S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
GSM 850	32.24	1.6749	3	0.66	1.0
PCS 1900	30.99	1.2560	3	0.50	Complies

From the peak EUT RF output power, the minimum mobile separation distance,  $d = 0.2$  m, as well as the gain of the used antenna, the RF power density can be obtained.