

RF EXPOSURE REPORT

CERTIFICATE OF CONFORMITY

FCC Rule Part: FCC Part 2 (Section 2.1091)

Report No.: MFBCUN-WTW-P23120641

FCC ID: H8NAPM7210

Product: AT&T Internet Air™ for Business Wi-Fi Extender

Brand: AT&T

Model No.: APM7210D Received Date: 2023/12/26

Test Date: 2024/2/16 **Issued Date**: 2024/2/20

Applicant: ASKEY COMPUTER CORP.

Address: 10F, No.119, Jiankang Rd., Zhonghe Dist., New Taipei City, Taiwan

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lin Kou Laboratories

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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kewi Shan Dist., Taoyuan City 33383, Taiwan

FCC Registration / 788550 / TW0003

Designation Number:

Jeremy Lin / Project Engineer

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Prepared by : Celine Chou / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
MFBCUN-WTW-P23120641	Original release.	2024/2/20

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1 Certificate

Product: AT&T Internet Air™ for Business Wi-Fi Extender

Brand: AT&T

Test Model: APM7210D

Sample Status: Engineering sample

Applicant: ASKEY COMPUTER CORP.

Test Date: 2024/2/16

FCC Rule Part: FCC Part 2 (Section 2.1091)

Standard: KDB 447498 D04 Interim General RF Exposure Guidance v01

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.



2 Applicable RF Exposure Limit

- § 1.1310 Radiofrequency radiation exposure limits.
- (a) Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) of this part within the frequency range of 100 kHz to 6 GHz (inclusive).
- (b) The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.
- (c) The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

(e) Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
	Limits For Gene	eral Population / Uncontrolle	ed Exposure	
0.3-1.34	614	1.63	(100)*	<30
1.34-30	824/f	2.19/f	(180/f ²)*	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.

Limits for Occupational/Controlled Exposure

Frequency Range Electric Field Strength (V/m)		Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Average Time (minutes)				
	Limits For General Population / Uncontrolled Exposure							
0.3-3.0	614	1.63	*(100)	⊴6				
3.0-30	1842/f	4.89/f	*(900/f ²)	<6				
30-300	61.4	0.163	1.0	<6				
300-1,500			f/300	<6				
1,500-100,000			5	<6				

f = frequency in MHz. * = Plane-wave equivalent power density.

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3 Applicable Evaluation Criteria

Routine Evaluation Procedure - Single and/or Multiple RF Sources

> MPE compliance are measurement in all directions surrounding the antenna and radiating structures of the device.

For non-directional antennas, MPE evaluation points shall be along radials extending from the antenna (axis) that are no more than 30° apart. The direction of maximum exposure shall be aligned with one of the radials.

For each specific exposure condition, the evaluation points along the longest dimension (e.g., vertical) shall use a spatial resolution of 10 cm or less, and shall extend at least 10 cm beyond the exposed portions of a person's body or until the evaluated results are less than 10% of the MPE limit. For exposures occurring next to the ground or next to a ground plane, the evaluation points shall be no closer than 10 cm from the ground.

☐ Simultaneous Operations - Multiple RF Sources

Fixed RF sources operating in the same time-averaging period – §1.1307(b)(3)(ii)(B)

Either SAR-based or MPE-based exemption may be considered for test exemption for fixed, mobile, or portable device exposure conditions; therefore, the contributions from each exemption in conjunction with the measured SAR (Evaluatedk term) should be used to determine exemption for simultaneous transmission according to Formula below,

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \le 1$$

The sum of the ratios of the applicable terms for SAR-based, MPE-based and measured SAR or MPE should be less than 1, to determine simultaneous transmission exposure compliance.

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using <u>paragraph (b)(3)(i)(B)</u> of this section for P_{th} , including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

 $P_{th,i}$ = the exemption threshold power (P_{th}) according to <u>paragraph</u> (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i. $ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least $N/2\pi$ according to the applicable formula of <u>paragraph</u> (b)(3)(i)(C) of this section. $Exposure\ Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.

b = number of fixed, mobile, or portable RF sources claiming exemption using <u>paragraph (b)(3)(i)(C)</u> of this section for Threshold ERP, including existing exempt transmitters and those being added.

 P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

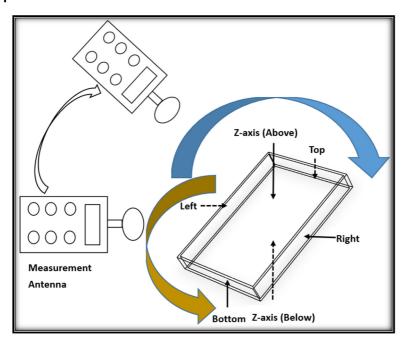
 ERP_j = the ERP of fixed, mobile, or portable RF source j.

 $Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

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4 Test Setup



Note: The measurement antenna are move and surrounding the EUT when performed the test, the test results recorded the highest values for each sides of the EUT (left/right/top/bottom/z-axis)

5 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
EM Field Meter Wavecontrol	SMP2 Dual	22SN1913	2023/07/06	2024/07/05



6 Test Results

Environmental Conditions:	25°C, 60% RH	Tested By:	Matthew Yang	
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For Single RF Source

Routine Evaluation (General Population)							
Operation Mode	Frequency Band (MHz)	Power Density (mW/cm ²)	Test Distance (cm)	Limit (mW/cm²)	Test Result		
WLAN 2.4 GHz	2412-2462	0.008	20	1	Pass		
WLAN 5 GHz	5180-5240 5745-5825	0.015	20	1	Pass		

Note:

- 1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 2. The manufacturer declares that maximum rated power ((including tune-up tolerances) is equal to maximum output power.

For Multiple RF Sources (Simultaneous Operations)

	•							
Multiple RF Sources (Simultaneous Operations)								
Routine Evaluation (General Population)								
Operation Mode	Frequency Band (MHz)	Power Density (mW/cm ²)	Limit (mW/cm²)	Ratio	Sum of Ratios	Limit of Ratios	Test Result	
WLAN 2.4 GHz	2412-2462	0.008	1	0.008				
WLAN 5 GHz	5180-5240 5745-5825	0.015	1	0.015	0.023	1	Pass	

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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7 Conclusion

Source-base time average power is below Exemption Criteria and/or Routine Evaluation MPE thresholds, therefore the device is compliant FCC RF exposure requirement.

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8 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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