

RF Exposure Report

Report No.: SA130107C03C

FCC ID: A8J-ENS500

Test Model: ENS500EXT

Series Model: ENS500

Received Date: Jan. 14, 2016

Test Date: Feb. 02 ~ Feb. 23, 2016

Issued Date: Mar. 04, 2016

Applicant: EnGenius Technologies

Address: 1580 Scenic Avenue, Costa Mesa, CA92626

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

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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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Release Control Record

Issue No.	Description	Date Issued
SA130107C03C	Original release	Mar. 04, 2016

1 Certificate of Conformity

Product: LONG RANGE WIRELESS 11N AP/CB

Brand: EnGenius

Test Model: ENS500EXT

Series Model: ENS500

Sample Status: Engineering Sample

Applicant: EnGenius Technologies

Test Date: Feb. 02 ~ Feb. 23, 2016

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-2005

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 EMC characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Mar. 04, 2016
Celine Chou / Specialist

Approved by : Ken Liu , **Date:** Mar. 04, 2016
Ken Liu / Senior Manager

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
5180-5240	22.84	8.01	20	0.242	1
5745-5825	22.51	8.01	20	0.224	1

Note: Directional gain = 5dBi + 10log(2) = 8.01dBi

* Both of the U-NII-1 band and U-NII-3 band can not transmit simultaneously

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