



RF EXPOSURE REPORT

REPORT NO.: SA131230C25

MODEL NO.: ESR300, EIR1000

FCC ID: A8J-ESR300

RECEIVED: Oct. 28, 2013

TESTED: Jan. 10 ~ Jan. 17, 2014

ISSUED: Feb. 11, 2014

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 Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA131230C25	Original release	Feb. 11, 2014



1. CERTIFICATION

PRODUCT: Wireless N300 Router
MODEL NO.: ESR300, EIR1000
BRAND: EnGenius
APPLICANT: EnGenius Technologies
TESTED: Jan. 10 ~ Jan. 17, 2014
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 2 (Section 2.1091)**
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (model: ESR300) 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 : Ivy Lin , **DATE** : Feb. 11, 2014
Ivy Lin / Specialist

APPROVED BY : Ken Liu , **DATE** : Feb. 11, 2014
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**.

2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
802.11b	23.87	2	20	0.077	1
802.11g	26.54	2	20	0.142	1
802.11n (20MHz)	28.21	5.01	20	0.418	1
802.11n (40MHz)	27.87	5.01	20	0.386	1

Note: 802.11n (20MHz) & 802.11n (40MHz): Directional gain = 2dBi + 10log(2) = 5.01dBi

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