

RF EXPOSURE REPORT

REPORT NO.: SA110913E01D

MODEL NO.: WUS-ND12B

FCC ID: RRK-WUSND12B

RECEIVED: Sep. 13, 2011

TESTED: Oct. 18, 2011

ISSUED: Jan. 16, 2012

APPLICANT: Alpha Networks Inc.

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Industrial Park, Hsinchu, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA110913E01D	Original release	Jan. 16, 2012

1. CERTIFICATION

PRODUCT: 802.11a/b/g/n WIFI Dongle
BRAND NAME: Alpha
MODEL NO.: WUS-ND12B
TEST SAMPLE: MASS-PRODUCTION
APPLICANT: Alpha Networks Inc.
TESTED DATE: Oct. 18, 2011
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: WUS-ND12B) 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 : Midoli Peng, **DATE:** Jan. 16, 2012
(Midoli Peng, Specialist)

APPROVED BY : May Chen, **DATE:** Jan. 16, 2012
(May Chen, Deputy Manager)

2. RF EXPOSURE LIMIT

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

3. 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

4. CLASSIFICATION

This WIFI dongle will be sold and used with TV. So the antenna of this product, under normal use condition, is at least 20cm away from the body of the user. Warning statement to the user for keeping at least 20cm or more separation distance with the antenna should be included in users manual. So, this device is classified as **Mobile Device**.

5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For WLAN: 15.247(2.4GHz)

FREQUENCY BAND (MHz)	CONDUCTED POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
2412 - 2462	709.8	1.39	20	0.195	1.00

For WLAN: 15.247(5GHz)

FREQUENCY BAND (MHz)	CONDUCTED POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
5745 - 5825	486.1	2.87	20	0.187	1.00

802.11n (40MHz): 120.1mW

For WLAN: 15.407(5GHz)

FREQUENCY BAND (MHz)	CONDUCTED POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
5180 -5240, 5260 - 5320, 5500 - 5580 & 5660 - 5700	120.1	2.87	20	0.047	1.00

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