

# **RF EXPOSURE REPORT**

- **REPORT NO.:** SA991025E08
- MODEL NO.: ARG-1220
  - FCC ID: VYXWIFI-011
  - RECEIVED: Oct. 25, 2010
    - TESTED: Aug. 25, 2011
    - **ISSUED:** Dec. 30, 2011
- **APPLICANT:** Argtek Communication Inc.
  - ADDRESS: 8F-9,No. 4, Lane 609,Sec. 5, Chung Hsin Rd. San Chung City, Taipei Hsien
- **ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
- LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

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## **RELEASE CONTROL RECORD**

ISSUE NO. REASON FOR CHANGE		DATE ISSUED
SA991025E08	Original release	Dec. 30, 2011



#### 1. CERTIFICATION

PRODUCT:	802.11a/b/g/n 300Mbps AP Router
BRAND NAME:	ARGtek
MODEL NO.:	ARG-1220
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Argtek Communication Inc.
TESTED:	Aug. 25, 2011
STANDARDS:	FCC Part 2 (Section 2.1091)
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: ARG-1220) 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	: <u>Lori Chung, Specialist()</u> , DATE: <u>Dec. 30, 2011</u>
APPROVED BY	:, DATE: <u>Dec. 30, 2011</u> (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 <sup>2</sup> )	AVERAGE TIME (minutes)				
LIMI	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

 $Pd = (Pout^*G) / (4^*pi^*r2)$ 

where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

pi = 3.1416

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

## 4. 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**.

#### 5. ANTENNA GAIN

There are three sets of antennas provided to this EUT, please refer to the following table:

Set	Antenna	Gain	Antenna	Frequency	Function
Sei	Туре	(dBi)	Connector	Range	
1	Dipole	5	RP-SMA	2400 ~ 2483	Tx / Rx
2	Dipole	5	RP-SMA	5725 ~ 5850	Tx / Rx
3	PCB	0	RP-SMA	5725 ~ 5850	Rx only



## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

## For 15.247(2.4GHz):

#### 802.11b:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	14.1	5	20	0.009	1.00

## 802.11g:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	144.5	5	20	0.091	1.00

## 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	134.9	5	20	0.085	1.00

## 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2422-2452	128.8	5	20	0.081	1.00



## For 15.247(5GHz):

## 802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5745 ~ 5825	1.3	5	20	0.001	1.00

### 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5745 ~ 5825	2.0	5	20	0.001	1.00

### 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
5755 ~ 5795	1.9	5	20	0.001	1.00



## For 15.407(5GHz):

#### 802.11a:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5180-5240	7.9	5	20	0.005	1.00

## 802.11n(20MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5180-5240	8.1	5	20	0.005	1.00

## 802.11n(40MHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5190-5230	6.5	5	20	0.004	1.00

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