

# 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

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#### 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 :

(Lori Chung, Specialist)

DATE: Dec. 30, 2011

APPROVED BY

( May Chen Deputy Manager )

**DATE:** Dec. 30, 2011



#### 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	POWER DENSITY (mW/cm²)	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

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
Set	Type	(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/ cm²)	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/ cm²)	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/ cm²)	LIMIT (mW/cm²)
5190-5230	6.5	5	20	0.004	1.00

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