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## RF Exposure Report

**Report No.:** SA120113E07K

**FCC ID:** PQRFXA2000-G

**Test Model:** FXA2000-G

**Received Date:** Apr. 20, 2016

**Test Date:** May 04, 2016

**Issued Date:** May 25, 2016

**Applicant:** Contec Co., Ltd.

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

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Taiwan R.O.C.

**Test Location:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

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### Release Control Record

Issue No.	Description	Date Issued
SA120113E07K	Original release.	May 25, 2016

## 1 Certificate of Conformity

**Product:** IEEE802.11n/a/b/g Wireless LAN (Access point / Station)

**Brand:** CONTEC

**Test Model:** FXA2000-G

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Contec Co., Ltd.

**Test Date:** May 04, 2016


**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

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 :**

  
Wendy Wu / Specialist

**Date:**

May 25, 2016

**Approved by :**

  
May Chen / Manager

**Date:**

May 25, 2016

## 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 <sup>2</sup> )	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/cm<sup>2</sup>

$P_{out}$  = 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

### 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 Antenna Gain

Brand	Model	Antenna Type	Peak Gain(dBi) (Exclude cable loss )	Net Gain (dBi) (Include cable loss )	Connector Type	Cable Length (cm)	Cable Loss (dB)	Transmitter Circuit
FDK	AN1523	chip	2.4GHz: 2	2.4GHz: 0.6	U.FL	16	1.4	Chain (0)
			5GHz :1	5GHz :-0.4				& Chain (1)

### 3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412 - 2462	597.443	3.61	20	0.27291	1
5180 - 5240	26.393	2.61	20	0.00957	1
5260 - 5320	31.436	2.61	20	0.01140	1
5500 - 5700	67.840	2.61	20	0.02461	1
5745 - 5825	101.569	2.61	20	0.03685	1

NOTE:

2.4GHz: Directional gain = 0.6dBi + 10log(2) = 3.61dBi.

5 GHz: Directional gain = -0.4dBi + 10log(2) = 2.61dBi

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