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# RF EXPOSURE REPORT

**REPORT NO.:** SA140102C03A  
**MODEL NO.:** AP102  
**FCC ID:** U2M-AP102  
**RECEIVED:** Jan. 13, 2014  
**TESTED:** Jan. 14 ~ Feb. 17, 2014  
**ISSUED:** Feb. 18, 2014

**APPLICANT:** Senao Networks, Inc.

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Taipei, Taiwan

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

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140102C03A	Original release	Feb. 18, 2014

## 1. CERTIFICATION

**PRODUCT:** Wireless 802.11abgn Access Point  
**MODEL NO.:** AP102  
**BRAND:** WatchGuard  
**APPLICANT:** Senao Networks, Inc.  
**TESTED:** Jan. 14 ~ Feb. 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: AP102) 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.

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Celine Chou / Specialist

**APPROVED BY :** Ken Liu , **DATE :** Feb. 18, 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 <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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

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 Calculation result of maximum conducted power

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
5260-5320	19.74	9.01	20	0.149	1
5500-5700	20.42	9.01	20	0.174	1

**NOTE:** Directional gain = 6dBi + 10log(2) = 9.01dBi