



RF EXPOSURE REPORT

REPORT NO.: SA140102C03

MODEL NO.: AP102

FCC ID: U2M-AP102

RECEIVED: Jan. 02, 2014

TESTED: Jan. 02 ~ Jan. 09, 2014

ISSUED: Feb. 14, 2014

APPLICANT: Senao Networks, Inc.

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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
SA140102C03	Original release	Feb. 14, 2014



1. CERTIFICATION

PRODUCT: Wireless 802.11abgn Access Point

MODEL NO.: AP102

BRAND: WatchGuard

APPLICANT: Senao Networks, Inc.

TESTED: Jan. 02 ~ Jan. 09, 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.

PREPARED BY : Celine Chou , DATE : Feb. 14, 2014
Celine Chou / Specialist

APPROVED BY : Ken Liu , DATE : Feb. 14, 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 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

2.2 MPE calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

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

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 ²)	LIMIT (mW/cm ²)
2412-2462	27.25	6.51	20	0.473	1
5745-5825	25.32	9.01	20	0.539	1

NOTE:

1. 2.4GHz: Directional gain = 3.5dBi + 10log(2) = 6.51dBi
2. 5GHz: Directional gain = 6dBi + 10log(2) = 9.01dBi