



# RF EXPOSURE REPORT

**REPORT NO.:** SA120927E01

**MODEL NO.:** Flex AP, MAX, Surf Pro, AP One, AP Pro,  
Device Connector, Express, Balance, Pismo 731

**FCC ID:** U8G-P1371

**RECEIVED:** Sep. 27, 2012

**TESTED:** Jan. 30, 2013

**ISSUED:** Feb. 20, 2013

**APPLICANT:** Pismo Labs Technology Limited

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**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd.,  
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## TABLE OF CONTENTS

RELEASE CONTROL RECORD.....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION.....	5
5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER .....	6



## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120927E01	Original release	Feb. 20, 2013



## 1. CERTIFICATION

**PRODUCT:** Pepwave / Peplink / Pismo Wireless Product

**BRAND NAME:** Pepwave, Peplink, Pismo

**MODEL NO.:** Flex AP, MAX, Surf Pro, AP One, AP Pro,  
Device Connector, Express, Balance, Pismo 731


**TEST SAMPLE:** ENGINEERING SAMPLE

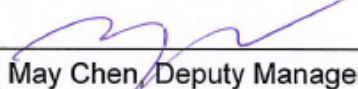
**APPLICANT:** Pismo Labs Technology Limited

**TESTED DATE:** Jan. 30, 2013

**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (Model: Flex AP) 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 :**  , **DATE:** Feb. 20, 2013  
( Claire Kuan, Specialist )

**APPROVED BY :**  , **DATE:** Feb. 20, 2013  
( 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 3. 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

### 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 31cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

### For WiFi :

Channel	Channel Frequency (MHz)	Output Power to Antenna (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )
6	2437	677.868	10	31	0.56132	1.00

### For LTE module: FCC ID (N7NMC7700)

Channel	Channel Frequency (MHz)	Output Power to Antenna (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )
128	824.2	1734.0	1.5	31	0.20282	0.5495

Note: Limit of Electric field=F/1500

### CONCLUSION:

The WiFi and LTE module can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 + \dots \text{etc.} < 1$$

**CPD = Calculation power density**

**LPD = Limit of power density**

Therefore, the worst-case situation is  $0.56132 / 1 + 0.20282 / 0.5495 = 0.930$ , which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.

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