



RF EXPOSURE REPORT

REPORT NO.: SA120618C25O
MODEL NO.: TEW-753DAP
FCC ID: XU8TEW753DAP
RECEIVED: Jun. 18, 2012
TESTED: Aug. 11 ~ Aug. 17, 2012
ISSUED: Aug. 13, 2013

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION	4
2. RF EXPOSURE.....	5
2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE).....	5
2.2 MPE CALCULATION FORMULA	5
2.3 CLASSIFICATION	5
2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120618C250	Original release	Aug. 13, 2013



1. CERTIFICATION

PRODUCT: N600 High Power Dual Band PoE Access Point
MODEL NO.: TEW-753DAP
BRAND: TRENDnet
APPLICANT: TRENDNET, Inc.
TESTED: Aug. 11 ~ Aug. 17, 2012
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: TEW-753DAP) 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** : Aug. 13, 2013
Pettie Chen / Senior Specialist

APPROVED BY :  , **DATE** : Aug. 13, 2013
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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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)	MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	802.11b	21.41	3	20	0.055	1
	802.11g	25.77	3	20	0.150	1
	802.11n (20MHz)	27.48	3	20	0.222	1
	802.11n (40MHz)	24.61	3	20	0.115	1
5180-5240	802.11a	13.72	4	20	0.012	1
	802.11n (20MHz)	14.60	4	20	0.014	1
	802.11n (40MHz)	16.68	4	20	0.023	1
5745-5825	802.11a	27.35	4	20	0.271	1
	802.11n (20MHz)	26.98	4	20	0.249	1
	802.11n (40MHz)	26.83	4	20	0.241	1

CONCLUSION:

Both of the WLAN 2.4G & 5.0G can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$1. \text{ WLAN 2.4G} + \text{WLAN 5.0G} = 0.222 + 0.271 = 0.493$$

Therefore, the maximum calculation of this situation is 0.493, which is less than the "1" limit.