



# RF EXPOSURE REPORT

**REPORT NO.:** SA111012C14

**MODEL NO.:** DAP-1533

**FCC ID:** KA2AP1533A1

**RECEIVED:** Sep. 30, 2011

**TESTED:** Sep. 30 ~ Oct. 24, 2011

**ISSUED:** Oct. 26, 2011

**APPLICANT:** D-Link Corporation

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

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**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
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R.O.C.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	NA	Oct. 26, 2011

## 1. CERTIFICATION

**PRODUCT:** Wireless N450 MediaBridge®/Access Point  
**MODEL:** DAP-1533  
**BRAND:** D-Link  
**APPLICANT:** D-Link Corporation  
**TESTED:** Sep. 30 ~ Oct. 24, 2011  
**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: DAP-1533) 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 : Andrea Hsia , DATE : Oct. 26, 2011  
Andrea Hsia / Specialist

APPROVED BY : Gary Chang , DATE : Oct. 26, 2011  
Gary Chang / Technical 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
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 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	802.11b	23.8	6.8	20	0.228	1
	802.11g	29.0	6.8	20	0.756	1
	802.11n (20MHz)	28.7	6.8	20	0.706	1
	802.11n (40MHz)	25.8	6.8	20	0.362	1
5180-5240	802.11a	15.0	7.8	20	0.038	1
	802.11n (20MHz)	14.9	7.8	20	0.037	1
	802.11n (40MHz)	15.1	7.8	20	0.039	1
5745-5825	802.11a	28.1	7.8	20	0.774	1
	802.11n (20MHz)	27.8	7.8	20	0.722	1
	802.11n (40MHz)	27.7	7.8	20	0.706	1

**NOTE:**

**802.11b & 802.11g:** Directional gain =  $2\text{dBi} + 10\log(3) = 6.8\text{dBi}$

**802.11a:** Directional gain =  $3\text{dBi} + 10\log(3) = 7.8\text{dBi}$