

## RF EXPOSURE REPORT

**REPORT NO.:** SA130321C09

**MODEL NO.:** DNUR-S2

FCC ID: VPQ-DNURS2

**RECEIVED:** Mar. 21, 2013

**TESTED:** Mar. 29 ~ Mar. 31, 2013

**ISSUED:** Apr. 08, 2013

**APPLICANT:** Trixell

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## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130321C09	Original release	Apr. 08, 2013

Report No.: SA130321C09 3 of 6 Report Format Version 5.0.0



#### 1. CERTIFICATION

PRODUCT: 802.11 abgn 2x2 USB Wifi Module

**MODEL:** DNUR-S2

BRAND: Unex APPLICANT: Trixell

**TESTED:** Mar. 29 ~ Mar. 31, 2013

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: DNUR-S2) 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 : Apr. 08, 2013

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**APPROVED BY**: Apr. 08, 2013

Ken Liu / Senior Manager



#### 2. EVALUATION RESULT

#### Following FCC KDB 447498 D01 "General SAR test exclusion guidance"

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by: [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 where
  - f(GHz) is the RF channel transmit frequency in GHz.
  - Power and distance are rounded to the nearest mW and mm before calculation.
  - The result is rounded to one decimal place for comparison The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.</p>
- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
  - a) [Threshold at 50 mm in step 1) + (test separation distance 50mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by  $\frac{1}{2}$  for test separation distances  $\leq$  50 mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.



#### 2.1 SAR TEST EXCLUSION THRESHOLDS

Maximum measured transmitter power:

Freq. Band (MHz)	Modulation Mode	Max. Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 2)</sup>	1-g SAR test exclusion thresholds	Result
	802.11b	4.477	5	1.387	3	Pass
	802.11g	4.688	5	1.453	3	Pass
2412-2462	802.11n (20MHz)	4.677	5	1.449	3	Pass
	802.11n (40MHz)	4.363	5	1.352	3	Pass
	802.11a	1.738	5	0.796	3	Pass
5180-5240	802.11n (20MHz)	1.746	5	0.799	3	Pass
	802.11n (40MHz)	1.719	5	0.786	3	Pass
	802.11a	1.734	5	0.800	3	Pass
5260-5320	802.11n (20MHz)	1.703	5	0.786	3	Pass
	802.11n (40MHz)	1.747	5	0.806	3	Pass
	802.11a	1.742	5	0.832	3	Pass
5500-5700	802.11n (20MHz)	1.746	5	0.833	3	Pass
	802.11n (40MHz)	1.742	5	0.832	3	Pass
	802.11a	1.746	5	0.843	3	Pass
5745-5825	802.11n (20MHz)	1.742	5	0.841	3	Pass
	802.11n (40MHz)	1.742	5	0.841	3	Pass

**NOTE:** 1. The antenna type is Dipole antenna with 3.0dBi gain (For 2.4GHz Band), 5.5dBi gain (For 5.0GHz Band).

### 2. CONCLUSION

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

<sup>2.</sup> Calculate SAR test exclusion thresholds from condition "1" formulas.