

# RF Exposure Report

**Project Number:** 4050119

**Report Number:** 4050119EMC04

**Revision Level:** 0

**Client:** Windrock, Inc.

**Equipment Under Test:** Wireless Encoder

**Model:** A6420

**FCC ID:** VYK-A6420

**Applicable Standards:** 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498

**FCC OET Bulletin 65 Supplement**

**Remarks:**

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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## 1 General Information

### 1.1 Client Information

Name: Windrock, Inc  
Address: 1832 Midpark Rd, Suite 102  
City, State, Zip, Country: Knoxville, TN 37921

### 1.2 Test Laboratory

Name: SGS North America, Inc.  
Address: 620 Old Peachtree Road NW, Suite 100  
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA  
Type of lab: Testing Laboratory  
Certificate Number: 3212.01

### 1.3 General Information of EUT

EUT: Wireless Encoder  
Model Number: A6420-00-00  
Serial Number: 1609642015

Frequency Range: 903.45 to 921.45 MHz  
Channels: 8  
Modulation type: GFSK  
Frequency Range: 2402 to 2480 MHz  
Channels: 79 Channels  
Modulation type: Bluetooth GFSK, EDR-2, EDR-3 (DH1, DH3, DH5)

Antenna (900MHz): ¼ Wave Dipole (Linx Technologies, ANT-916-CW-QW)  
Antenna (2.4GHz): ¾" External Monopole, Reverse SMA

Rated Voltage: 7.2 Vdc Li Ion Battery

Sample Received Date: 22 November 2016  
Dates of testing: 29 – 30 November 2016 / 24 – 26 January 2017

### 1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum measured conducted power was considered.

## 2 RF Exposure

### 2.1 Test Result

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

### 2.2 Test Method

Using the maximum measured conducted powers, the power density was calculated.

### 2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density $EIRP_{avg}/(4\pi R^2)$ mW/cm <sup>2</sup>	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
Type	MHz				dBm	mW					
900MHz	902-928	11.4	1.8	0.0	13.2	21	20	0.004	0.60	1%	Pass
Bluetooth	2400-2483.5	1.4	-0.9	0.0	0.5	1	20	0.000	1.00	0%	Pass

### 2.4 Simultaneous transmission RF Exposure Levels

With both radios transmitting simultaneously, the summed percentage of the limit is <1% of the FCC limit.