

# RF Exposure Report

**Project Number:** 4897775**Proposal:** SUW-202108001494**Report Number:** 4897775EMC02**Revision Level:** 0**Client:** Windrock, Inc.**Equipment Under Test:** Wireless Encoder**Model Number:** A6420**FCC ID:** VYK-A6420**Applicable Standards:** 47 C.F.R. §§ 2.1091; FCC KDB 447498**FCC OET Bulletin 65 Supplement****Report issued on:** 26 April 2022**Test Result:** Compliant

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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Reviewed by:

  
Jeremy Pickens, RF Lab Manager

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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: 1808642281

Frequency Range (900): 903.45 to 921.45 MHz  
Channels (900): 8  
Modulation type (900): GFSK  
Antenna (900): 3.8dBi Whip Element w/Base & Cable  
(Linx Technologies, ANT-ELE-S01-005 / ANT-MAG-B85-RPS)

Frequency Range (BT): 2402 to 2480 MHz  
Channels (BT): 79 Channels  
Modulation type (BT): Bluetooth GFSK, EDR-2, EDR-3 (DH1, DH3, DH5)  
Antenna (BT): -0.9dBi Monopole (Linx Technologies, ANT-2.4-CW-RH)

Rated Voltage: 7.2 Vdc Li Ion Battery

Sample Received Date: 18 March 2022  
Dates of testing: 13 – 15 April 2016

### 1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum measured peak 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 peak conducted power, the power density was calculated. Maximum antenna gain was assumed for this exercise.

### 2.3 Single transmission RF Exposure Levels

Type	Band of Operation MHz	Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP <sub>Avg</sub> /(4πR <sup>2</sup> ) mW/cm <sup>2</sup>	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
					dBm	mW					
Bluetooth	2400-2483.5	1.4	-0.9	0.0	0.5	1	20	0.000	1.00	0.02%	Pass
Sub GHz	902-928	11.4	3.8	0.0	15.2	33	20	0.007	0.60	1.10%	Pass

### 2.4 Simultaneous transmission RF Exposure Levels

With both radios transmitting simultaneously, the summed percentage of the limit is 1.12% of the FCC limit.

### 3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	26 April 2022