

OET Inquiry Responses

Re: FCC ID:

WUS00040, WUS00041, WUS00045

Applicant:

AirPointe of New Hampshire

Correspondence Reference Number:

Form 731 Confirmation Number:

Date of Original E-mail:

STATEMENT 1: Your grants for FCC ID's WUS00041, WUS00045, and WUS00040 will be issued/reissued with the following grant note which is in accordance with your filings:

"This device is for commercial use only and intended for use in a confined area with an appropriate system receiver as indicated in the Certification filing."

Please respond to let us know whether or not you have any issues with the grant note.

RESPONSE: We have no issue with this grant note.

QUESTION: Under Section 15.231(a) all transmissions from your device must be remote control (turning something on or off), not just some. How do your devices comply with this rule? How exactly does your system work? How do the different parts work together?

RESPONSE: They system is comprised of three types of physical elements: Tags, Enhancers, and Readers.

Tags are RF transmitters that are attached to assets (people or equipment) within a facility in which Readers and Enhancers are installed. The tags send two types of signals, one is a user initiated control signal and the other is a status signal. The user initiated control signal is transmitted when the user directs the tag to signal via the stimulation of the tags sensors (Button, Tap on the case that causes sufficient vibration within the tag to start a transmission, etc.). The control signal is an RF transmission approximately 1ms in duration and is used to turn on a light. In addition the control signal also contains information detailing what sensor was activated by the user, such as button 1 or button 2 and a numeric identifier. The status signal is an RF transmission approximately 1ms in duration sent at regular periodic intervals no faster than once every 10secs. The status signal includes information such as a numeric identifier, battery voltage, and temperature.

An Enhancer is a device similar to a Tag that is mounted in fixed location within a facility that also has the ability to receive RF signals. Similar to a Tag the Enhancer has a control signal and a status signal that it transmits. As with the tag the control signal of a duration less than 50ms is used to turn on a light and also contains information about what sensor was activated by the user, a numeric identifier, and information identifying which tags it received signals from during the immediate time surrounding the user activation. The status signal is an RF transmission approximately 1ms in duration sent at regular periodic intervals no faster than once every 10secs. The status signal includes information such as a numeric identifier, battery voltage, and temperature.

Readers are mounted in fixed location at a facility and receive RF signals from Tags and Enhancers. The readers turn on a light when the appropriate signals are received from Tags and Enhancers. They also collect the additional information received in the control and status signal and send that information to a central server for further processing and resulting actions (updating user screens, sending text message alerts, sending email alerts, etc). This collected information is sent to the server either via a wired or wireless (Wi-Fi) Ethernet connection.

Re: FCC ID:	WUS00041
Applicant:	AirPointe of New Hampshire
Correspondence Reference Number:	43324
Form 731 Confirmation Number:	EA757412
Date of Original E-mail:	01/31/2013

STATEMENT: Under Section 15.231(a) the intentional radiator is restricted to the transmission of a control signal. Data may be sent with the control signal.

QUESTION: Please indicate how your device complies with this rule part. Describe the control signal the device sends.

RESPONSE: The user initiated control signal is an RF transmission with a particular data packet format that is transmitted when the user directs the tag to signal via the stimulation of the Tags sensors (Button, Tap on the case that causes sufficient vibration within the tag to start a transmission, etc.). In addition the control signal also contains information detailing what sensor was activated by the user, such as button 1 or button 2 and a unique numeric identifier for that Tag.

FCC ID:	WUS00045
Applicant:	AirPointe of New Hampshire
Correspondence Reference Number:	43214
Form 731 Confirmation Number:	EA600975
Date of Original E-mail:	01/15/2013

STATEMENT: You state in your application that your device is a repeater. Repeaters must comply with the requirements stated in KDB Publication 602159.

QUESTION: What is/are the FCC ID number(s) of (all) the transmitter(s) with which the repeater is authorized to operate?

QUESTION: For the test results provided in the test report, with which transmitter was the repeater operating?

RESPONSE: Unfortunately the term repeater in the description of this device was a poor choice of words, as a result we have changed to using the term Enhancer. This particular device does not fall under the definition of a repeater as described in KDB Publication 602159. KDB Publication 602159 describes a repeater that re-transmits an input signal following some type of conditioning to that signal. Our device does not operate under the same definition of a repeater described in KDB Publication 602159. The device operates in two modes, one being a user activated mode in which a user causes the transmission of an RF signal that is used to turn on a light at e Receiver, and a status mode in which the device transmits periodic status signals. In the control signal information about what sensor was activated by the user, a numeric identifier, and information identifying which tags it received signals from during the immediate time surrounding the user activation is also included.

Re: FCC ID:	WUS00045
Applicant:	AirPointe of New Hampshire
Correspondence Reference Number:	43409
Form 731 Confirmation Number:	EA600975
Date of Original E-mail:	02/07/2013

QUESTION: Describe in detail how exactly this device works with the other transmitters.

QUESTION: Describe how this device operates as a remote control which is a requirement of 15.231(a).

QUESTION: Does your device send periodic transmissions at regular predetermined intervals?

QUESTION: What does a packet transmission look like for a single activation from an IR detector or manual trigger? What happens if multiple devices send signals to the repeater?

RESPONSE: This is a device similar to a Tag that is mounted in fixed location within a facility that also has the ability to receive RF signals. This device has a control signal and a status signal that it transmits. The control signal is of duration less than 50ms and is used to turn on a light. The control signal also contains information about what sensor was activated by the user, a numeric identifier, and information identifying which Tags it received signals from during the immediate time surrounding the user activation. Should the device receive signals from multiple Tags who's transmissions overlap, no information for those tags will be provided in the control signal. The status signal is an RF transmission approximately 1ms in duration sent at regular periodic intervals no faster than once every 10secs. The status signal includes information such as a numeric identifier, battery voltage, and temperature.