

Lucy Tsai

From: Thomas Cokenias [tom@tncokenias.org]
Sent: Tuesday, June 22, 2010 8:37 AM
To: Lucy Tsai
Subject: Re: Silver Spring Networks, FCC ID: OWS-NIC515, Assessment NO.: AN10T0438, Notice#1

Sorry, it is an SMA standard connection at the radio side, and cable connection at antenna side is N connector. Professional installation required.

best regards

tom

On Jun 22, 2010, at 6:35 AM, Lucy Tsai wrote:

Hi, Tom,

How about the connection of the RF cable and antenna? Are they integral or detachable?

Best Regards,

Lucy

From: Thomas Cokenias [<mailto:tom@tncokenias.org>]
Sent: Tuesday, June 22, 2010 6:27 AM
To: Lucy Tsai
Subject: Re: Silver Spring Networks, FCC ID: OWS-NIC515, Assessment NO.: AN10T0438, Notice#1

Hi Lucy,

ANS 1 Yes, we wanted limited modular originally so this is ok. Please change the application to limited modular.

ANS2 The maximum gain is 3 dBi, with minimum cable loss already figured in.

Does that answer the questions? If you need further information please let me know.

best regards

Tom

On Jun 21, 2010, at 10:46 PM, Lucy Tsai wrote:

Hi, Tom,

For Q#1, if then, it can only be certified as limited modular because it is required for professional installation.

For Q#2, according to test setup photos, the antenna connected to the gate way is via a RF cable. Is the RF cable detachable? Does the antenna gain include the cable loss? Please provide a complete antenna specification, including antenna gain, cable loss and antenna connector.

Best Regards,

Lucy

From: Thomas Cokenias [<mailto:tom@tncokenias.org>]

Sent: Friday, June 18, 2010 11:56 AM

To: Lucy Tsai

Subject: Re: Silver Spring Networks, FCC ID: OWS-NIC515, Assessment NO.: AN10T0438, Notice#1

Hi Lucy

Answers follow questions.

thanks and best regards

Tom

On Jun 4, 2010, at 2:56 AM, <lucy.tsai@ccsemc.com> <lucy.tsai@ccsemc.com> wrote:

Hi, Tom,

Please address following issues.

Q#1: According to the EUT design and user manual, instead of a module, this device is just like a bridge and considered an end product. Modular approval is not applied.

ANS1 We would like to keep the product as a modular product. Per the grantee, - With the current design, we have to sell the s-bridge with an enclosure. However, once we make an improvement, we would like to sell it with out it. So, we wanted to apply the s-Bridge as a limited modular approval.

Q#2: Please provide antenna specification.

ANS2 Antenna data is attached. It is an SMA standard connection at the radio side, and cable connection at antenna side is N connector. Professional installation required.

Q#3: According to operational description, an internal antenna is supplied instead of external antenna. It is difference from the EUT design. Please address.

ANS3 Attached is the revised manual with the correct antenna references. This product only has external antenna

Q#4: According to the specification as indicated on the user manual, the antenna connector is SMA female which is considered as a standard connector and per 15.203, professional installation is required. If it is, please provide professional installation guide as well.

ANS4 The revised manual calls for professional installation

Q#5: User manual shall include related RF exposure statements. Please provide an updated user manual.

ANS5 RF exposure information is in the revised manual

Q#6: Please provide an additional document or revised technical description to include information describing compliance with the requirements of 15.247(a)(1), 15.247(g) and 15.247(h) as follow.

15.247(a)(1) The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

15.247(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

15.247(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

ANS6 This information is in the revised theory of operation

Q#7: Regarding the request of keeping internal photos for permanent confidentiality, please let us know once it is confirmed by FCC.

ANS7 Copy of FCC ok email attached

Best Regards,

Lucy