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Date: March 17, 2005

Attention: Dennis Ward

In response to your comments dated March 17, 2005 regarding the application for FCC ID: S23-GATEWAY1, please find our responses below:

1. Please note that while the operational description details the 26ms transmitted packet, it does not show that the transmitter actually shuts off within 5 seconds of activation of transmission. Please provide evidence that the device meets the 5 second transmission restriction requirements of 15.231(a(1) and/or 15.231(a)(2).

> The plot shows the single transmission burst in a 100ms window. Each individual transmission consists of one packet and, therefore, complies with the 5 second requirement.
>
> Note that the same timing plots were provided to the FCC for the transceiver module approval under FCC ID B4Z-723-TCVR and no additional plots were requested.

2. Please note that 2.1033 of the rules require that the clock and crystal information be provided for transmitters. Please note that there appears to be a 106.5MHz crystal in the transmitter circuitry for this device. The schematics appear to show that the third harmonic (319.5MHz) of this clock is then 'tuned' in the transmitter circuitry to obtain the transmit frequency. Please explain why this information was not provided in the block diagram for the rf portion of the device. Please provide a block diagram that meets the requirements of 2.1033(b)(5) of the FCC rules.

> The block diagram and schematics were provided by the transceiver vendor and were the exact same exhibits were provided to the FCC for the transceiver module approval under FCC ID B4Z-723-TCVR. We contacted the transceiver vendor and they have provided an updated block diagram.

3. 15.231 states that data can only be sent with a control signal. A control signal indicates that it commands a device to perform a function. The operational description is not clear on the data and addressing features. It states, "The RF transceiver is only used for the purposes of communicating with alarm devices and safety and security sensors. The control information transmitted between the iControl gateway and the devices includes addressing as well as device data." Please confirm that this is to mean that data is only sent in conjunction with a control signal and is never sent alone.

> The gateway sends control command that include addressing information. All of these signals are control signals that contain addressing information. No data-only signals are transmitted.
>
> In addition it sends supervisory polling commands, as permitted under 15.231(a), to certain sensor types.

4. Page 31 of the manual states a live video capability. The report indicates that this is done via IP communications, however, neither the manual nor the operational description are clear on this issue. Can the device use rf cameras? If so, this would indicate continuous transmission to the device from a remote camera. Please note that this is not allowed under 15.231. Pease verify that this live video capability is not a function of any 15.231 transmitter device.

> The cameras are all ethernet interface devices and are not a part of the 15.231 transmitter/receiver functions. Control of these cameras is via the wired ethernet connection on the gateway.

5. Please note that the manual mentions a keychain remote. This keychain is not an evident part of this application. Does it have its own FCC ID number? Please explain.

> The keychain is not a part of this application and is for remotely controlling the gateway. It will be sold under a separate FCC ID, as yet to be determined.

6. Page 10 of the report references a version of ANSI C63.4 that has not bee acceptable for a number of years. Please note that 15.31(a)(3) institutes the immediate use of the newest 2003 version of ANSI C63.4. Please note that this 2003 version has significant differences and variations from the referenced version in the report. Since 15.37 (the transition section) has no transition time frame for the use of ANSI C63.4 2003, please provide evidence that the report is in accordance with the acceptable ANSI C63.4 2003 test methods and procedures.

> The report references are outdated. All testing was performed in accordance with the 2003 version of ANSI C63.4. Evidence of this is demonstrated by the fact that the AC adapter was located on the test table and not connected directly into the AC outlet. The report has been updated.

7. Please note that the plot of run4 (page 29) and the table of results (page 30) of the test report shows conducted emissions on the "line" lead from 450kHz to 30MHz. Please note that 15.107 and 15.207 conducted limits are from 150kHz to 30MHz. Please explain.

> Correct, these tests were run against the requirements of RSS 210, which use the 450kHz – 30MHz frequency range. FCC test data is given on pages 27 and 28 of the test report and cover the appropriate frequency range and appropriate limits.
>
> For the RSS 210 test the carrier current device within the system had to be decoupled to demonstrate compliance with the RSS 210 limits. The carrier current device and transmitter were operational during the FCC tests as the combined emissions were still below the 15.107/15.207 limits.

8. FYI – no action needed as the device is still compliant. Please note that the spurious emissions limits for 15.231 devices above 470MHz is an average limit of 61.9dBuV/m (20log[1250uv/m] not 55.9dBuV, and the peak would be 81.9dBuV/m not 75.9dBuV/m.

> It is my understanding that the limit of the spurious emission is based on the frequency of the fundamental signal and not on the frequency of the spurious emission (15.231(b) states that maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level). Based on this interpretation the limit for the spurious emissions is 55.9dBuV/m, except in restricted bands where the limit is the 15.209 limit.

The following documents have been uploaded to the ATCB website to support the responses above:

- Block Diagram updated 03-17-05.pdf
- R58878-revised.pdf

Regards,

Mark Briggs

Principal Engineer