



ZEUS TECHNOLOGY SYTEMS, INC.

7257 Parkway Drive
Hanover, Maryland 21076
Phone: 410-712-0555
Fax: 410-712-0880

July 31, 2003

American Telecommunications Certified Body, Inc.
6731 Whittier Avenue
Suite C110
McLean, VA 22101

RE: Request for Modular Approval

FCC ID: Q5L-ZRC-20

Zeus Technology Systems, Inc. requests "Modular Approval" for the ZRC-20 FHSS Transceiver in consideration of having met the following FCC Part 15 device requirements:

1. The modular transmitter has its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed.
2. The modular transmitter has buffered data inputs to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.
3. The modular transmitter has its own power supply regulation and/or filtering. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.

4. The modular transmitter complies with the antenna requirements of Section 15.203 and 15.204(c). The antenna employs a “unique” reverse thread SMA coaxial antenna coupler at all connections between the module and the antenna, including any cables. All antenna used with the module have been approved with the module at the time of initial authorization or will be through a Class II permissive change. The “professional installation” provision of Section 15.203 does not apply to these modules.
5. The modular transmitter was tested in a stand-alone configuration, not inside another device during testing. This was intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. The transmitter module is not battery powered, and complies with the AC/DC line conducted requirements found in Section 15.207. AC/DC power lines and data input/output lines connected to the module did not contain ferrites. The length of these lines is unknown and were greater than 10 centimeters to insure there was no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing was unmodified or commercially available.
6. The modular transmitter will be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed will also display a label referring to the enclosed module. This exterior label will include the following wording: “Contains Transmitter Module FCC ID: Q5L-ZRC-20” or similar wording that expresses the same meaning. The Grantee has provided a notice in the Users Manual providing adequate instructions in which explains this requirement. A copy of the Users Manual has been included with the application for equipment authorization.
7. There are no strict or specific operational and/or timing requirements that must be met before the transmitter is authorized for operation under Section 15.231. Data transmission is not limited by external factors due to the transceivers internal data processing.

8. Spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Zeus addresses certain RF Exposure concerns, by providing specific installation and operating instructions contained in the Users Manual for, installers and other interested parties to ensure compliance.

Thank you for your attention to this matter.

Sincerely,

Terry Fry
President
Zeus Technology Systems, Inc.