



12/3/08

Subject: Cover Letter Requesting Modular Approval

FCC ID: KQL-Z100S1XFX

IC: 2268C-Z100S1XF

Aerocomm would like to apply for a modular FCC approval for FCC ID: KQL-Z100S1XFX transceiver in accordance with FCC public notice DA 00-1407. Listed below are the modular transmitter requirements followed by a manufacturer clarification for FCC ID: KQL-Z100S1XFX.

Rule 1. The modular transmitter must have its own RF shielding.....

Clarification: The Z100S1 has a permanently fixed shield attached at the factory.

Rule 2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.

Clarification: The Z100S1 buffers the modulation and data in firmware. The buffering of data is controlled by the Zigbee stack and Aerocomm's firmware. The OEM customer cannot adjust firmware to provide for excessive data rates or modulation parameters outside of the FCC approved modes.

Rule 3. The modular transmitter must have its own power supply regulation. 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.

Clarification: The RF engine and microcontroller on board the Z100S1 is the CC2430 which has an on board regulator to ensure stable operation of the internal RF controlling devices over the specified voltage range.

Rule 4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c).

Clarification: The Z100S1 complies with the antenna requirements of Section 15.203 and 15.204(c). Either an integral antenna (WIC2450-A) or a unique antenna coupler (u.fl RF connector) are soldered on during the manufacturing process.

Rule 5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is 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.....

Clarification: The Z100S1 was tested in a stand alone configuration. A serial interface and power were supplied. See the test report for this device.

Rule 6. The modular transmitter must 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 must also display a label referring to the enclosed module.....

Clarification: The Z100S1 has the FCC ID permanently printed on the module in white lettering at the time of manufacturing. The manual contains directions for OEM customers labeling requirements on their equipment.

Rule 7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.....

Clarification: The Z100S1 complies with all specific rules applicable to a 2.4Ghz spread spectrum transmitter and any regulatory precautions are addressed in the manual.

Rule 8. The modular transmitter must comply with any applicable RF exposure requirements.

Clarification: The Z100S1 is approved under mobile/ fixed classification and meets the applicable RF exposure requirements. Installation and RF exposure precautions are listed in the manual.