



2/2/2009

Re: Modular Transmitter Approval
FCC ID: WJU-URMA2450

Gentlemen,

The following information is being provided per the requirements of DA 00-1407 regarding modular approval of Part 15 devices.

This transmitter is a complete RF module with an integral reference oscillator.

External connections are provided for power and data communication.

The following numbered items correspond to similarly numbered paragraphs in DA 00-1407. Each item is a response to the requirements of that document.

1. The module has integral RF shielding to isolate it from surrounding equipment and the larger environment in general.
2. All inputs are processed as data by the on-board microcontroller. The outside user has no direct control of transmit modulation.
3. The EM250 on-chip 1.8V voltage regulator powers the radio sub-system. An additional on-board regulator allows for module input voltages from 3.4V to 9V, providing 3.3V to power the EM250 and the power amplifier, which is specified from 2.1V to 3.6V. A build option allows for bypassing of the on-board regulator for power inputs between 2.2V and 3.6V without affecting the radio performance characteristics.
4. There is only an on-board integrated PCB antenna. No other antennas can be used with this module design except when connected to the module through an RF I/O pin which is a build option. In this case the user, who is integrating the antenna in their own product, will be responsible for specifying an antenna for their end product's FCC grant.
5. The module was tested in a stand-alone configuration and found to be compliant with Part 15 regulations.
6. An FCC label is affixed to each unit at the time of manufacture. Information is also clearly presented in the user guide about labeling requirements for the final assembly.
7. This unit is compliant with Part 15.247. Installation and other requirements are presented in the user guide to allow the unit to be correctly installed.
8. The unit is compliant with the RF exposure requirements of Parts 15.247 and 2.1091

Further information may be obtained from Cipher Systems, Inc.

Sincerely,

A handwritten signature in black ink that reads "Carl B Van Wormer".

Carl Van Wormer