TWO DIMENSIONAL INSTRUMENTS, LLC

ATCB
October 28, 2010

Dear Application Examiner,

Two Dimensional Instruments WS4TX , FCC ID: YVGWS4TX, would like to have your authorization for Module Approval specific to the low power transmitter. The requirements of Public Notice DA00-1407 have been met and shown on the following statements.

1. "The modular transmitter must have its own RF shielding.":

The modular transmitter has an integral RF shielding in the PCB 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 must have buffered modulation/data inputs."

Data inputs are buffered by the rfPIC12F675 input circuitry and the transmitter is under software control. This ensures the data packet length and data rate is limited and remains compliant with Part 15 requirements. Any analog data is buffered and converted to a digital form for transmission, thus preventing possible over modulation.

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

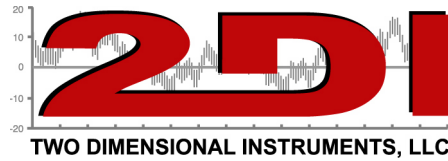The module has an on board voltage regulator which powers the microcontroller and transmitter circuitry.

4. "The modular transmitter must comply with the antenna requirements of section 15.203 and 15.204(C)."

The antenna is a PCB trace on the module and is permanently attached to the module.

5. "The modular transmitter must be tested in a stand-alone configuration"

The module was tested in a stand-alone configuration using a typical interface PCB to provide battery power and signals to the module for testing.

6. "The modular transmitter must be labeled with its own FCC ID number."

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See label and label location drawing contained in this application. The label is visible on the module and appropriate instructions are given in the user manual for end users who incorporate the module in the final product.

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."

The WS4TX module is software controlled and the software controlling the transmitter functionality is not controllable by the end-user and thus all modules will meet these requirements.

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

The WS4TX module meets all the requirements and is shown in dBI Corporation Test Report.

Frederick G Kaestner
CEO