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U l t r a W i d e b a n d S o l u t i o n s

Letter Requesting Modular Approval

October 10, 2007

Chief, Authorizations Branch
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

RE: Certification Application
FCC ID: SUAPL3301
FRN: 0012367751

To Whom It May Concern:

The purpose of this letter is to request modular approval from the Federal Communication Commission (FCC) for the Pulse~Link, Inc Ultra-Wideband (UWB) product model number PL3301, FCC ID: SUAPL3301, FRN: 0012367751

This letter is addressing the eight requirements for Pulse~Link, Inc. modular transmitter per the FCC Second Report and Order FCC 07-56 Section A – "Single Unit Modular Transmitters".

1. The modular transmitter must have 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. Such coupling may result in non-compliant operation.

   The PL3301 module consists of pcb assembly and two antennas with permanently attached antenna cables ended with MMCX connectors. All electrical components are located on a top side of pcb. All radio transmitter components of the pcb assembly are enclosed with the RF shield. In addition, all RF traces are located on top layer under the RF shield.

Furthermore, the shield prevents coupling between the RF circuitry and the wires or circuits of the device into which the module will be installed.

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.

   All input and output data ports on PL3301 are buffered. PL3301 does not employ external modulation ports.

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.

   PM3301 is supplied with 5 Volts via the PCI connector and it has its own 3.3 Volts and 1.8 Volts power supply regulation.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). Any antenna used with the module must be approved with the module, either at the time of initial authorization or through a Class II permissive change. The "professional installation" provision of Section 15.203 may not be applied to modules.

   The module has one transmit antenna and one receive antenna. Both antennas have permanently attached antenna cables terminated into MMCX connectors. The antenna cable connectors are plugged into the matching MMCX connectors permanently attached on the pcb. PL3301is intended to be installed in final device within the single enclosure by the system integrators. The antennas may be mounted inside the enclosure or outside. The end users will not have any access to the antenna connectors and, thus, will not be able to change antennas.

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. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be a length typical of actual use or, if that length is unknown, at least 10 centimeters to ensure that there is no coupling between the case of the module and any supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified or commercially available (see Section 15.31(i)).

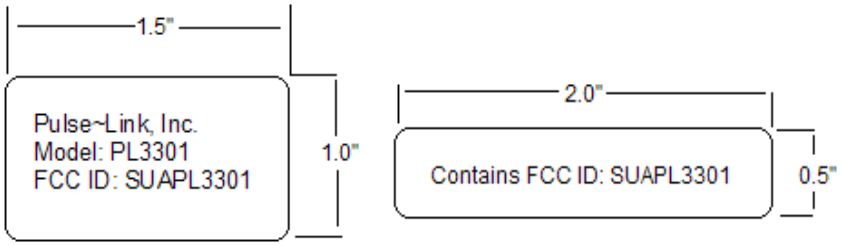
   The PL3301 is intended to be tested in a stand-alone configuration using Pulse~Link, Inc. test fixture. The test fixture is used to bring power to the module. The exposed lines do not contain any ferrite noise suppressors. All accessories connected to the module are readily available from commercial sources. Please, refer to "INSTRUCTIONS FOR FCC TESING-

MODE FOR FCC COMPLIANCE AND CONFORMANCE TESTING" for complete description of the set-up.

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. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

   PL3301 comes with two intended FCC ID labels. One label made by Pulse~Link is placed directly on the RF shield of the PL3301. The second label shows the required by FCC ID Label that must be displayed on a finished product. FCC Second Report and Order FCC 07-56 Section A – "Single Unit Modular Transmitters" specifies the required label in paragraph 6. It is the responsibility of product integrators to affix such label on finished product.

   The label information is included in the Label Guidelines document and the PL3301 User Guide.



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. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.

   The operational limitations of PL3301 are listed in the User Guide and the Test Report.

8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f), 15.255(g) and 15.257(g) require that applicants for authorization of Unlicensed PCS, U-NII and millimeter wave devices perform a routine

environmental evaluation for RF exposure to demonstrate compliance. In addition, applicants for authorization of spread spectrum transmitters operating under Section 15.247 are required to address RF exposure compliance in accordance with Section 15.247(i). Applicants for authorization of modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF exposure concerns, typically by providing specific installation and operating instructions for users, installer and other interested parties to ensure compliance.

PL3301 complies with the Maximum Permissible Exposure. The Compliance Test Report lists the power density of PL3301 which is much below the maximum permissible limit.

Sincerely,

Raj Sengottaiyan
VP of Engineering
PulseLink, Inc.