

Request for Modular Transmitter Approval

Everex Communications, Inc is seeking modular authorization for WR-23XX radio module (FCC ID:TF7WR-23-1000), as per the requirements of FCC Public Notice DA00-1407 regarding modular approval of Part 15 devices.

1. The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.

The modular transmitter has its own shielding as shown on the external photo exhibits.

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/output data are buffered and processed by the onboard microcontroller.

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

There is an onboard 2.8V regulator which provides stable supply voltage to the modular transmitter.

4. The modular transmitter must comply with the antenna and transmission system requirements of Sections 15.203, 15.204(b) 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). The "professional installation" provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.

The modular transmitter has an integral PCB antenna or an external dipole antenna via U.FL connector or via direct coaxial cable soldered to the transmitter PCB.

5. The modular transmitter must be tested in a stand-alone configuration, *i.e.*, the module must not be inside another device during testing for compliance with Part 15 requirements. 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 the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see Section 15.31(i)).

The modular transmitter was tested fully exposed in a stand-alone configuration on a test fixture.

- 6. The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.
- (A) If using a permanently affixed label, the modular transmitter must be labeled with its own FCC identification number, and, if the FCC identification number 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.
- (B) If the modular transmitter uses an electronic display of the FCC identification number, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the module is installed inside another device, then the outside of the device into which the module is installed must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC certified transmitter module(s)." Any similar wording that



expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization.

The modular transmitter FCC ID will be labeled onto its PCB. Labeling requirement is stated in the user guide if the transmitter is embedded inside another device.

7. The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete 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.

The modular transmitter is compliant with Part 15.247. Installation and other requirements are presented in the user guide to allow the unit to be installed correctly.

8. The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.

The modular transmitter had been tested to comply with applicable RF exposure requirements.

Vincent Chan, Engineering Director

Everex Communications, Inc.

1045 Mission Court, Fremont, CA 94539

USA.