

September 11, 2014

Compliance Testing LLC
1724 South Nevada Way
Mesa, AZ 85204

RE: Xetawave, LLC (Grantee Code: PEJ)
Request for Modular Approval
Modular requirements from FCC KDB Publication 996369 DO1 Module Certification
Guide v01r03

To Whom It May Concern,

XetaWave is submitting this application for certification of the Xeta4m-HP radio module under FCC ID# PEJ-93824-XETA4HP. We are requesting Modular Approval. The Xeta4m-HP is sold strictly through distribution partners who provide professional installation services as a part of their integrated solution to end users. The radio meets the requirements for modular approval as stated in the subject FCC KDB document. Compliance to each requirement is described below from excerpts of the subject document.

III. Modular Transmitters Subject to the Licensed Radio Services Rules:

- i. **Split-modular approvals or limited split-modular approvals are not permitted for licensed modular devices; - Not Applicable**
- ii. **The applicant can use Section 15.212 provisions for additional guidelines for good engineering practice. In this case, the modular approval cover letter must also include an itemized list documenting compliance with analogous conditions (see Section II A of this document);**
 1. **"The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly"** The radio has a shield completely covering the entire RF area installed at the factory. Please see the Internal Photo exhibit.
 2. **"The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal."** Data is not directly modulated by user input. Modulation is controlled, buffered and digitally timed by the processor.
 3. **"The module must contain power supply regulation on the module"**. Satisfied by the schematic exhibit. The module has its own internal power supply regulation as shown in the schematic exhibit.
 4. **"The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b). Not applicable to a Part 90 device.**

5. **"The module must demonstrate compliance in a stand-alone configuration".** The module was tested in a stand-alone configuration. Satisfied by test setup photos in the technical report exhibit.
 6. **"The module must be labelled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labelling requirements)."** Satisfied by the photographic exhibit and photo in the installation manual. A clearly visible label printed with the FCC ID is affixed to each radio at the factory prior to shipment.
 7. **"The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee."** The module limits operating frequency and output power by internal, factory installed, firmware settings. Detailed instructions for maintaining compliance are stated in the user manual.
 8. **"The module must comply with RF exposure requirements."** Satisfied by the MPE calculation exhibit.
- iii. **The grantee is required to provide to other parties (e.g., host manufacture, Original Equipment Manufacturers) and end users, clear documented instructions as described in Section I.** This requirement is satisfied by installation manual exhibit.
 - iv. **The grantee is responsible for full compliance;** The module was tested in accordance with Part 90. Satisfied by the technical report exhibit.
 - v. **Licensed modular grant conditions shall be listed on the grant:**
 - a) **The maximum antenna gain to ensure compliance with rules, such as EMC (e.g. EIRP, PPSD limits)** - Satisfied by MPE calculation and technical report exhibits. The gain used for the MPE calculation is based on an antenna industry research that found the highest gain antenna available for this frequency range to be 18 dBd. The calculations also provide the maximum antenna gain using the highest power setting. See by the MPE calculation document for the Xet4m-HP exhibit. This information is also provided in the installation manual exhibit.
 - b) **RF exposure requirements** - Satisfied by the MPE calculation document for the Xet4m-HP exhibit.
 - c) **Host product limitations;** Satisfied by the host provisioning and pertinent information provided in the installation manual exhibit. The module must be installed in a NEMA, or equivalent, enclosure.
 - vi. **For guidance on FCC ID labeling see KDB Publication 784748 (section on Module Labeling).** Satisfied by the photographic exhibits.
 - vii. **Licensed modular devices must be compliant to all specific applicable licensed radio service rules.** Satisfied by the technical report exhibit.

Respectfully submitted,



Craig Held
Executive VP
XetaWave, LLC