

JAKE THE LEADER IN REMOTE ASSET TRACKING



MODULAR APPROVAL REQUEST

1/12/2012

TRaC Global 100 Frobisher Business Park Leigh Sinton Road Malvern Worcestershire WR14 1BX UK

RE: FCC Licensed Modular Approval

FCC ID: PB5Q96XXCS

To Whom It May Concern:

Please be advised that the manufacturer requests that the above-referenced model be approved for Licensed Modular Approval in accordance with the FCC Rules and Regulations. Specifically regulation FCC **Title 47 Part 15 section 2.12**. All the following requirements apply:

(i) 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 Q4000/QPRO shielding contains all elements of modular transmitter as well as all tuning capacitors.

(ii) 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.

The Q4000/QPRO uses buffered modulation to ensure that it complies with part 15 requirements regarding excessive data rates or over-modulation.

(iii) The modular transmitter must have its own power supply regulation.

The Q4000/QPRO transmitter has its own power supply regulation.

(iv) The modular transmitter must comply with the antenna and transmission system requirements of Sec. Sec. 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 Sec. 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.

The Q4000/QPRO antenna complies with the antenna and transmission system requirements of Sec. Sec. 15.203, 15.204(b) and 15.204(c).

(v) 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 Sec. 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 Sec. 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 [[Page 807]] unmodified and commercially available (see Sec. 15.31(i)).

The Q4000/QPRO complies with this requirement.

(vi) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.

The Q4000/QPRO label will be permanently affixed to the modem.

(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.

The Q4000/QPRO complies with this requirement.

(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 instruc-





tions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization.

This is not applicable.

(vii) 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 Q4000/QPRO complies with this requirement.

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

The Q4000/QPRO complies with this requirement.

(2) Split modular transmitters must meet the requirements in paragraph (a)(1) of this section, excluding paragraphs (a)(1)(i) and (a)(1)(v), and the following additional requirements to obtain a modular transmitter approval.

The Q4000/QPRO is not a split modular transmitter.

Thank you for your attention to this matter.

Yours faithfully

Darrin Calin

Director Customer/Technical Support

Quake Global, Inc. 4933 Paramount Drive

San Diego, CA 92123