



American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

September 2, 2002

RE: FCC ID: MQOTT600-35300

Attention: Desmond Fraser / Kathy Grzovic

I have a few comments on this Application. The information needed for this app is the same as for the MQOTT600-22300

- 1 Your report references TIA603-1. This is a Part 15.247 device and the proper reference for testing is ANSI C63.4 and for DSSS - FCC 97-114. Please correct the reference to show testing was performed properly and to the recommended FCC procedures.
- 2 15.247b is a rf antenna conducted test. Please note FCC 97-114 states, "If antenna conducted tests cannot be performed on this device, radiated tests to show compliance with the various conducted requirements of Section 15.247 are acceptable. As stated previously, a pre-amp must be used in making the following measurements." This exclusion is typically used for devices with permanent non-removable antennae only. In cases where the antenna port is accessible and where the antenna can be removed to facilitate measurement, as in this PCMCIA card, the FCC wants to see antenna terminal measurements made and plots provided. Please note that according to the photos, the technical description and the results of antenna conducted tests in section 9.1 of the report, this device is fully capable of making antenna terminal measurements for power output and band edge compliance. Since it is fully capable of having antenna conducted terminal measurements performed and since it does not meet the "if antenna conducted tests CANNOT be performed" requirements, these antenna conducted terminal measurements need to be done.

Note: Even when radiated measurements are allowed for devices with permanently attached non removable antenna(s), ANTENNA SUBSTITUTION is not allowed. Instead the formula $\text{Peak Power} = (E_d)^2 / 30G$ must be used. This may also refer to the problem with the incorrect test methods mentioned in the report as stated in item 1.

Please correct your report to show compliance to the FCC rules for FHSS devices in accordance with 15.247 ANSI C63.4 and FCC 97-114. This includes power out, radiated conducted emissions and band edge conducted compliance to 15.247c

- 3 During EMC and SAR testing Peak Power out must be within 5% of each other. Power listed in the SAR report and the powers listed in the EMC report and significantly different and exceed this 'defacto' FCC limit imposed on SAR reports. Please correct the reports to show the proper Power Out measurement methods and results (see item 2 above).
- 4 This is a body worn device of a power level requiring SAR measurements. As such, all accessories that may potentially cause SAR levels to increase or vary must be identified. The SAR report does not provide the part number or reference number for the Belt clip or other accessories. Please put these references in the SAR report.
- 5 The manual mentioned a number of belt straps and 2 belt clips. The SAR report only shows evidence of testing one belt clip. What steps were taken to insure that this one clip was the worse case.
- 6 The SAR report shows only one headset was tested. The manual says there are two types - VXI lightweight headset and VXI cupped headset (for freezer use). Please provide evidence that both headsets are SAR compliant and that the tests reflect the worse case.

- 7 SAR reports must show the model or part number of accessories tested with the unit not just the generic name (belt clip – headset, etc). The SAR report provided does not indicate the model or part number of the belt clip nor the headset used during testing. Please provide a SAR report that correctly identifies these items.
- 8 The manual states the device is a DoC FCC Part 15 B device. The manual does not contain the no-modification statement as required for Part 15.21. Please provide this information in the manual.



Dennis Ward

<mailto:dward@AmericanTCB.com>

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.