



# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

July 22, 2004

RE: Teletronics Technology Co., Ltd.

FCC ID: R5ITT-136

After a review of the submitted information, I have a few comments on the above referenced Application.

### **Administrative Issues:**

- 1) Both the main unit Ethernet cable and the AC adapter appear to require ferrites. Please note that the FCC expects the ferrites to already be placed on the cables in a permanent manner (i.e. molded) and the cables provided to the end user. Note that snap on ferrites are typically not allowed. The FCC does not want the burden of compliance to rest with the user, or for the user to easily remove. However if the system is professionally installed only (see additional question below about professional installation) then the installer may install these if the professional installation manual clearly show them how. Please explain how the manufacturer will address this issue.
- 2) No letter of confidentiality has been provided. Please provide if this request is desired on confidential parts of the application such as schematics and/or block diagram. If not, then please confirm this fact.
- 3) Some of the internal photographs are actually external photographs (EUT, POE, Antennas, etc). Additionally, please include photographs of the antennas for sale with the system and being approved with this application as part of the external photographs exhibit. Please adjust these exhibits as necessary.
- 4) The operational description mentions 3 different versions of this device. What are the differences? Do any of these differences affect the RF testing?
- 5) The block diagram and schematics are not for the PCMCIA Card. Note that a block diagram and schematic for the TX portion of the device is required as specified 2.1033(b)(5) for the RF section. Please provide a block diagram and schematic for the PCMCIA card or as an alternative, you may provide a parts list that lists that this part is provided by another manufacturer. Please provide either a schematic or parts list as specified. If necessary, please update the confidentiality letter to include the parts list if provided.
- 6) This system appears to use standard N connectors for the antennas. To meet the requirements of 15.203 using a standard connector, this device will be limited to Professional Installation only. If this device will only be professionally installed, this requires a cover letter justifying professional installation to be provided. The letter should address the following 3 items:
  - a) Marketing  
example: The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers or have strict marketing control.
  - b) Requires professional installation  
examples:
    - installation must be controlled.
    - installed by licensed professionals ( EUT sold to dealer who hire installers)
    - installation requires special training ( special programming, access to keypad, field strength measurements made) What is unique, sophisticated, complex, or specialized about your equipment which REQUIRES it to be installed by a professional installer?
  - c) Application  
example:
    - The intended use is generally not for the general public. It is generally for industry

- 7) The device appears to be able to function on channels beyond those allowed in the U.S. Please explain how the device will be build such that the end user in the U.S. does not have the capability to select these channels (CFR Part 15.15)
- 8) Upon reviewing the test report, several sections complained that the font would not display. Please reconvert the test report and embedding the font into the PDF or correct all the fonts to a standardized font.
- 9) Please explain why some plots (page 61, 65, 69, 97, 101, 105,) show emissions at or over the limits, but the tables appear to show lower values.
- 10) For emissions > 1 GHz the EUT must meet both the peak and average limits. Therefore if any peak emission exceeds the average limit, average measurements must also be made. This does not appear to be done in all cases. For instance, page 120 @1704 MHz & 2686 MHz, page 124 @ 1788 MHz, page 126 @ 1880 MHz & 2695 MHz & 16886 MHz, page 128 @ 1048 MHz, page 130 @ 1086 MHz, page 134 @ 1048 MHz & 1746 MHz & 2796 MHz).
- 11) Many of the average readings are 15 – 20 dB below the peak readings > 1 GHz. The TX appears to maybe have had a duty cycle present during some tests. Normally these tests are expecting the device to be placed into 100% TX mode of operation with NO duty cycle. Note that the use of 10 Hz VBW for average measurements expects the device to be placed into 100% TX with no associated duty cycle. Please provide information regarding the TX on/off time and period or if the TX had no duty cycle. Note that normally the peak/average delta for these types of devices is about 8-11 dB.
- 12) FYI....For PSD tests, the VBW should be > RBW, not = 3 kHz (with RBW set to 3 kHz). Please be careful of this in future applications.



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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.