



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

September 15, 2002

RE: PKW-WAP51AB

FCC ID: THE LINKSYS GROUP, INC.

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

- 1) Data sheet information found on Linksys Group's web site quotes a power of +18 dBm (63 mW) – see data sheet provided separately. The users manual also state + 18 dBm (802.11a) and 15 dBm (802.11b). However the highest power quoted in the application is 14.6 dBm (29 mW) for 802.11 and 10.5 dBm (11.3 mW). These are lower than expected for most access points and are 3-5 dB below the information given in the users manual and data sheet. Please comment.
- 2) Schematics were not provided for either the 802.11a or 802.11b mini-PCI RF boards. Please provide schematics for these boards.
- 3) Please provide information regarding each of the mini-PCI RF boards that are in this device (i.e., model, manufacturer, etc.).
- 4) For compliance testing of the radio, this device was tested as a stand-alone unit. However for DoC emissions it should be configured as part of a minimum configuration as specified by ANSI C63.4. Please confirm that the EUT has been properly configured as part of a fully configured for its DoC authorization.
- 5) FYI, Pages 5 and 10 of the test report references TIA/EIT-603-A. This standard is not necessary to show compliance for this device.
- 6) This device contains 2 transmitters which may be assumed to be transmitting simultaneously. Therefore this device must show that it meets co-location requirements (according to multiple frequency exposure criteria, the ratio of field strength or power density to the applicable exposure limit at the exposure location should be determined for each transmitter and the sum of these ratios must not exceed 1.0 for the location to be compliant. Please add this information to your RF exposure exhibit.
- 7) The users manual should also include co-location information to the user.

802.11A Questions

- 8) This device was tested for the data rate that produced the highest output power for normal mode (6 Mbps). What about "Turbo Mode" (usually highest power at 12 Mbps)?
- 9) Some devices in "Turbo Mode" use different channel lists. Please comment on if the "Turbo Mode" utilizes a different channel set.
- 10) Please provide power measurements for the "Turbo Mode".
- 11) For the peak excursion measurement, please provide information regarding the RBW & VBW used for both traces. The information is only shown for one trace.
- 12) Please provide information in the users manual regarding 15.407(e). This information should be placed in the users manual (i.e. regarding the installation of the device - Chapter 4) in a location that is obvious to the reader.

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- 13) In Section 5.6 of the test report it is not obvious how the levels were calculated using the substitution method. Please provide an example providing specific information regarding the substitution antenna (gain, etc) that show the calculations are for EIRP.



Timothy R. Johnson
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@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.