



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

December 30, 2003

RE: Airspan Networks

FCC ID: PIDAIRSPAN-IDR

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

- 1) The antenna being approved with this device contains a standard N connector. The use of a standard N connector anywhere in the RF path will only be allowed if the unit is professionally installed according to 15.203. The manual does not make this fact clear regarding this device. If the device will be professionally installed, the users manual should clearly state this in chapter 10. Additionally, if professional installation is to be used, the application would require a cover letter from the applicant requesting this and covering the following items below. Alternatively, an antenna without an N connector may be used.
  - a) Marketing  
The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers.
  - b) Requires professional installation;
    - 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  
-for example, the intended use is generally not for the general public. It is generally for industry/commercial use.
- 2) Plots A68 & A69 show results exceeding the Average limits in Peak mode around 12 MHz (not the 3 MHz suggested). However, none of the data (QP or AVG) appears to show measurements were made around this point of interest in spite of the high results shown in the plot. Data around this point, or additional plots showing average emissions should have been provided. It is not apparent that the emissions at 12 MHz will meet the Average limit requirements.
- 3) Please confirm that this device only operates in a hybrid mode of operation during actual use, and does not contain a mode of operation where just FHSS or DTS are employed. The file "Description\_Hybrid Mode\_900" tends to suggest the device may be used in hybrid or FHSS modes as shown on page 5. Additionally, the table may actually be applicable to a different model. Please adjust as necessary.
- 4) There appears to be a mix match of compliance information provide which has made the review process difficult. It is not clear which method was used to show compliance to a hybrid system as required by the FCC. The information contained in "Description\_Hybrid Mode\_900" and the table regarding limits suggests the use of Method 3. Data in the report appear to show information regarding both FHSS and DTS, also suggesting method 3. However measurement data regarding 20 dB bandwidth for minimum channel separation was not provided for method 3. Your last response mentioned Method 1. Please clarify which method is being used to show compliance for the FCC rules. The file "Description\_Hybrid Mode\_900" is misleading. For instance, this file states that the minimum number of hopping frequencies are 25 or 13. Note that if method 1 or 3 is used to show compliance, minimum number of hopping channels is not applicable. Issues such as spectral density have not been shown for either method 1 or 3. If method 1 was used, minimum bandwidth has not been shown. Please adjust this exhibit as it is currently confusing and misleading.

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- 5) FYI.....Positioning of the setup during Unintentional Emissions testing does not appear to follow ANSI C63.4 requirements. Note that the computer and monitor should be positioned on the back edge. It does not appear this was done during radiated emissions. Also, the keyboard should be centered on the monitor but does not appear to have been done for either conducted or radiated emissions. Since the DoC aspect of this device is not covered by this application, we will not require further information is not necessary on this issue. However the laboratory should ensure that worse case results following proper techniques are shown in any DoC reports.



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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.