



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

October 28, 2005

RE: FCC ID: F8I--DCX1902A_ATCB002891

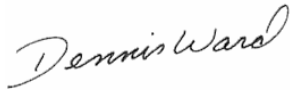
Attention: Joel Schneider

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. Please note that the manual and operational description describe this device as a multi-band device operating in the 850MHz and 1900MHz bands. Please note that this application is only for the 1900MHz system. Please note that the manual and other documentation does not clearly separate the 850MHz from the 1900MHz versions. Please explain and please clearly identify the separate systems. Please confirm that this device does not have capability of operating at 850MHz. If the device does operate in the 850MHz band, please correct the 731 and please provide all appropriate test data. If this device does not operate in the 850MHz band, then the manual and other documentation must appropriately address this specific device (i.e. a table of models and their specific operating range).
2. Please note that the manual also indicates that this device operates in the Part 90 iDEN service. Please explain and please clearly identify this device and the FCC rules under which it operates. If the device does operate in the iDEN service, please provide a corrected 731 and all appropriate test data. If this device does not operate in the iDEN service, then the manual and other documentation must appropriately address this specific device.
3. The operational description indicates that this device works not only with conventional CDMA but has CDMA2000 capabilities. Please note that CDMA2000 has both 1x EV-DO and cdma2000 3x standards. Cdma2000 3x as part of what the ITU has termed IMT-2000 CDMA MC (Multi Carrier). It uses less than 5 MHz spectrum (3x 1.25 MHz channels) to give speeds of over 2 Mbps. Cdma2000 1x with lower data speed is considered to be a 2.5G technology. Please note that the type CDMA2000 modulation scheme used in this device has not been defined. Please note also that the device in question needs to provide the appropriate CDMA2000 occupied bandwidths commensurate with the modulation types available in the device. Please provide the appropriate CDMA2000 occupied bandwidth plots. Alternately, this device would not be approved for CDMA2000 operation and the operational description would have to be changed to remove this option. Please advise as to how the applicant wishes to proceed.
4. Please note that the manual and other documentation indicates CDMA2000. If the CDMA2000 modulation is for the EU version, please clearly specify. Alternately additional testing as mentioned the items below.
5. Please note that section 7.1 of the manual indicates that AMPS is also an available modulation. If AMPS is a modulation type, please provide that necessary data for AMPS mode; alternately, please explain how the provided data meets AMPS requirements.
6. Please note that the output power for each type emissions designator is required to be on the grant. Please note that only a CW signal was used to measure output power for this device. While this may be OK for FM, it is not appropriate for GSM or CDMA type modulations. Please provide the conducted antenna terminal output powers for all emissions types.
7. As the device accepts multiple inputs, please clarify if the power out of the device listed on the 731 is a composite of multichannels or per carrier.
8. Please note that the FCC has designated F9W as the appropriate emissions designator for CDMA and W-CDMA. Please correct the 731 to reflect the accepted emissions designators.
9. Please note that band edge compliance and out of band compliance must be shown for each emissions type. Please note that CW is only acceptable for FM modulation and is not acceptable for GSM or CDMA type modulations. Please provide the appropriate band edge compliance data for the type modulations requested.
10. Please note that compliance is unclear on the conducted emissions plots as the trace from 10GHz to 20GHz appears to show frequencies that are over the limit in places. It is not possible to tell if

these are signals from the EUT and thus making the EUT is non-compliant, or if these signals are actually noise floor. Please clearly show compliance of the EUT at these frequencies.

11. Please note that as long as there are no radiated spurious emissions within 20dB of the limit field strength data from an OATS can be used to justify not making antenna substitution measurements. Please note that the radiated spurious emissions test data on pages 31 through 46 of the test report are ambiguous as they do not provide information as to the modulation type used. Please also note that all modulation types must be tested. Please provide measured data for all modulation types used in the device. If any emissions from the OATS field strength data is within 20dB of the limit (-13dBm) please provide antenna substitution data for those emissions in accordance with TIA603.
12. Please note that the email from the applicant stated that this system was to be used with a maximum antenna gain of 5.5dBi. Please note that the MPE report state that the maximum gain is 16.87dBi. Please explain and please provide an MPE report that represents the actual device and antenna.
13. Please note that based on the responses to the above comments, further questions may arise.



Dennis Ward
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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.