

## TCB Comments – 12-29-06

1) The device appears to only contain a single internal antenna from internal photographs, however it is believed this should contain at least 2 antennas given the test report and other information in the application. Please clarify, update, and/or label any exhibits necessary to clearly show this.

Section 2.1 of the test report contains the antenna information. The PCB antenna is built into the circuit board itself. The internal patch antenna is mounted on the inside of the plastic chassis. The internal photos have been updated to show views of both antennas.

2) FYI....Please note that external photographs have been requested to be held short term confidential. While these will be held as short term confidential, please note that the labeling exhibit can not be held as such. The label exhibit does require showing placement on the device, but this label is also an external view.

No action necessary.

3) The manual page 2 appears to show an FCC DoC logo. Note that this device does not appear to require a DoC Authorization and any suggestion of such an approval should not be given. Please consider removing.

The FCC DoC logo has been removed and an updated user's manual has been provided for review.

4) The test report cites that the rated output is +12 dBm (average?), but the operational description and manual supports +14 dBm.

The test report is corrected to show +14 dbm as average power. The unit was set to +14 dBm during testing.

5) The 731 form cites 331 mW, while the test report appears to show 106 mW. Note that the output power for 15.247 devices is expected to be conducted power. Please explain.

The 731 form has been updated with the correct information.

6) Please explain how the device handles an output if the input is > -40 dBm specified for input levels.

For input power > -40 dBm, the power limiter circuit will detect that the output power exceeds its target and shutdown the PA. This shuts down the transmit output power. This is described in paragraph four of the Theory of Operation document. The power limit circuit is shown in the block diagram. The block diagram is also included in the Theory of Operation document.

7) It is uncertain if the output power from the internally generated signals test data has been provided. The test report appears to only show repeated output power.

Internally generated test data was taken for this test and is labeled as DBPSK in the test report.

8) It is uncertain whether or not the device is capable of transmission of several channels at the same time. Please explain.

This technology can only transmit one channel at a time.

Example: The AP is set to transmit on channel 1. The Xtender is set to repeat the channel combination 1 and 11. When the AP transmits a packet on channel 1, the Xtender receives the packet and re-transmits to channel 11 on one signal path. The other signal path is disabled. The NIC will receive the packet on

channel 11. When the NIC transmits on channel 11, the Xtender receives the packet and re-transmits to channel 1 on one signal path. The other signal path, used for AP repeating, is disabled.

9) From a previous application, the methods used by this device were discussed with the FCC. If relevant here, these same discussions should be included. If relevant, please confirm that the device functions in the manner as described in the FCC discussions previously provided and provide a copy for this application of the discussion. If this is considered confidential information, please be sure to upload this discussion separately as an operational discussion exhibit.

The same documents concerning the FCC discussions are attached. This unit functions in the same manner as described in the document. Also, this unit operates in the same manner as the previous version of this technology (FCC ID: T27-XDEMO2B) which has been FCC certified.

10) If the output is not fully regenerated and operates off an AGC amplifier, typically the FCC desires emissions to be checked with minimum and maximum input levels into the AGC circuit as the variable gain may affect spurious emissions. Has this been performed? Have worse case emission been reported?

The worst case emission data has been reported. Test report is corrected to reflect this. Please see page 17 of the report.