



# Washington Laboratories, Ltd.

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November 6, 2002

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

RE: Comments of October 22, 2002  
APPLICATION: FCC ID: QGK-DT100 Demarc Technologies Group, LLC

Dear Mr. Ward:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in ***bold italic***. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

*Gregory M. Snyder*  
Chief EMC Engineer, Wireless/Telco Services Manager

*Brian J. Dettling*  
Documentation Specialist

WLL Project: 7165

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October 14, 2002  
RE: FCC ID: QGK-DT100  
Attention: Gregory M. Snyder / Brian J. Dettling

1) The manual states 8 feet separation from antenna. This disagrees with the MPE calculations. Please coincide the separation distances that will be on the grant. (Please note, since the max gain of the antenna must cause the power to be reduced by 2.3dB [see item 3], the max MPE would be less than 20cm anyway [i.e. 18dBi ant 18dB power = 17.8cm distance]. This means the standard 20cm separation statement would be adequate for this device and should be used on the grant).

***R. The manual has been updated to correct the separation distance to the 25 cm as listed in the MPE report. Please see exhibit "100MW User Guide Rev 2.pdf".***

2) The manual states, "A unique style (reverse MMCX) connector is provided on the DT-ZM-100mW-WC to prevent the use of non-approved or high gain antennas." Please note, the antenna(s) used in the report are high gain antenna(s). The statement therefore is confusing as to the intent. Please restate the manual to prevent the use of non-approved antennas.

***R. The statement in the User's Manual has been amended.***

3) The defacto power including antenna gain of 15.247 devices is 36dBm, or the one watt delivered to the antenna + a 6dBi gain antenna (30dBm + 6Dbi = 36dBm). Please note that the use of the 18 dBi gain antenna puts the device over the defacto limit of 36dB. The highest power measured was 20.3dBm. Since this system cannot be used as an exclusive point to point system, this means that the highest gain antenna that can be used to meet the defacto power is or 15.7 dBi (36-20.3). You must either reduce the conducted power delivered to the antenna on this device by 2.3dBm for use with an 18 dBi gain antenna or you must reduce the maximum antenna gain allowable with the device to 15.7dBi.

***R. With antenna gains of more than 15 dBi are only to be used at client site for point-to-point applications. The User's Manual has been updated to reflect this.***

4) How is the label permanently affixed to the device?

***R. The manufacturer attests that the label is printed on Mylar, and is applied with a permanent, pressure-sensitive adhesive.***

5) You reference schematics to be used in a previous grant. This reference (M4Y325H1) does not exist. There is an FCC ID file for M4Y-3251 and a file for M4Y-0325H. But no reference to the FCC ID number specifically mentioned in the letter exists. Please provide either the schematics, or the proper designation for the FCC ID involved.

***R. Please see previously uploaded exhibit "ZComax Release Letter Amendment.pdf" which gives the correct FCC ID of M4Y-325H2.***