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

October 22, 2002

RE: FCC ID: QGK-DT100<br>Attention: Gregory M. Snyder / Brian J. Dettling

I have a few comments on this Application.
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 2.3 dB [see item 3], the max MPE would be less than 20 cm anyway [i.e. 18 dBi ant 18 dB power $=17.8 \mathrm{~cm}$ distance]. This means the standard 20 cm separation statement would be adequate for this device and should be used on the grant)
2 The manual states, "A unique style (reverse MMCX) connector is provided on the DT-ZM100 mW -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.
3 The defacto power including antenna gain of 15.247 devices is 36 dBm , or the one watt delivered to the antenna +a 6 dBi gain antenna $(30 \mathrm{dBm}+6 \mathrm{Dbi}=36 \mathrm{dBm})$. Please note that the use of the 18 dBi gain antenna puts the device over the defacto limit of 36 dB . The highest power measured was 20.3 dBm . 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 $15.7 \mathrm{dBi}(36-20.3)$. You must either reduce the conducted power delivered to the antenna on this device by 2.3 dBm for use with an 18 dBi gain antenna or you must reduce the maximum antenna gain allowable with the device to 15.7 dBi .
4 How is the label permanently affixed to the device?
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.


Dennis Ward
mailto:dward@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.

