

American TCB

August 21, 2006

RE: Microwave Data Systems FCC ID: E5MDS-SERIES6
Attention: David Waitt

Please find our responses to your comments on this Application below:

1. Please provide an RF exposure exhibit supporting the RF exposure warning statement in the user manual in section 1.0 which mentions a safe distance of 3.17meters

Response: An MPE calculation has been provided. Please keep in mind that for license radios, that have removable antennas, are not normally tested with antenna(s) attached per TIA-603. The power density limit is 1 mW/cm² above 1.5GHz and the limit is not frequency dependent so only the "assumed" antenna gain and maximum power output was used to determine the 3.17 meters RF safety distance. Also, the responsible Bureau will handle the RF exposure compliance during the license process.

2. Please provide the following internal photos:
Close up photos of the internal boards
Photos of the reverse side of the board
Internal photos of the microwave module
Photos in the internal antennas of the unit

Response: The Duplexer is a passive cavity tuned band pass filter. There are no active parts and inside is just a milled out series of resonant slots all assembled by loads of screws that are glued after tuning. We can not take one apart without destroying/detuning it. The following photos have been provided:

Front side of RF board with no shields
Backside of RF board
Front side showing the antenna

3. Plot 1 and plot 2 on pages 6 and 7 of 30 appear to be the same plot, Freq 6110.75. Should the second plot be 6165.1, also plot for 6362 appears to have been omitted? Please verify and correct if necessary

Response: Data has been correct please refer to revised report uploaded.

4. Is the RF TX power “field adjustable”. Please outline precautions that prevent unauthorized personnel from adjusting the TX power.

Response: Yes the RF power is adjustable through the IDU controller software. This is a licensed device radio in the 6.4GHz band, the general public will not have access to the software that controls the RF power. Once the system path is planned out the professional installer will set the RF power in conjunction with the antenna gain to meet the FCC limit.

This is referenced in the manual in section 3.6.6.2, 6.4GHz band and lists the maximum allowable power and restrictions.

Regards,

Juan Martinez
Senior EMC Engineer