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RE: MDS Data Systems
FCC ID: **E5MDS-MERCURY900 (ATCB3865)**

1: Please provide photos of the bottom of the boards shown below.

Response: Photos have been provided

2: Please provide a separate block diagram exhibit (similar to that of page 6 of the operational description)

Response: A separate Block diagram has been uploaded

3: Is this device configured locally or is it possible to configure the device remotely (either by wire or wireless)? How is the transmit power configured? What protection is in place to prevent reconfiguration by unauthorized personnel after the professional installation has occurred. (eg: increasing the transmit power)

Response: The RF power settings are set in software and password controlled. The Professional Installer has access to set/change the system password so there is no unauthorized access to critical settings, such as RF power, Modem settings and modulation settings. Thus ensuring once the system is functioning there are no changes except by the installer. Professionally trained by MDS certification.

4: Power level given in the table on page 19 do not appear to match the level shown in the plot on the following page. Please explain.

Response: The power plots are recorded for the higher output power levels table under the 7dBi antenna. No plots taken for the 11.2dBi since these are lower levels and applicant wants approval on the highest power output.

5: Test report page 19 outlines two antennas, a yagi and an omni. The gain of the omni is specified as 7dBi. On page 19 of the test report the omni gain is given as 6dBi. The data sheets provided indicate a gain of 7dBi. MPE also shows 7dBi. Please explain using 6dBi in the test report.

Response: Antenna gain has been changed to 7dBi. Revised report uploaded. Please also review the note I added.

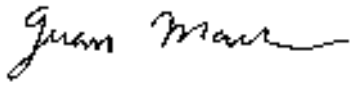
6: Data sheets for several antennas were provided. Please provide guidance on the anticipated authorized antennas. Is it Yagi up to 11.2dBi and Omni up to 7dBi?

Response: The Yagi family is the MAXRAD model BMOY8905 which has 9dBd gain, data sheet attached. The OMNI family is MAXRAD is model MFB9157 which has 7dBd gain, data sheet attached. We chose the highest gain in each family to assure all lower gains were type approved by topology.

7: It appears AC line conducted emission was omitted from the report. Please include.

Response: Data has been provided as a separate data sheet.

Regards,



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