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RE: Microwave Data Systems
FCC ID: E5MDS-INETII

1) The product literature mentions upgradable firmware by the user. Please note that adjustments to radio parameters such as frequencies and other parameters are not allowed under 15.15. Section 15.15(b) prohibits adjustments of any control by the user that will cause operation of a device in violation of the regulations. Accordingly, any proposal to allow the end user to choose extended channels on frequencies outside of an allowable frequency band in the USA is not acceptable. For example, a WLAN device operating according to Section 15.247 on channels 1-11 between 2.4 - 2.483.5 GHz must not have any user controls or software to allow the device to operate on channels 12 and 13 which are outside of the allowed USA band. Please explain how this device is compliant to this requirement for all bands of operation.

Please refer to the document “MDS Response to ATCB.pdf” in which the manufacturer addresses these issues.

2) Internal photographs should show the top and bottom of all boards. Please correct.

Internal photographs have been uploaded.

3) Please explain compliance to 15.203 requirements. Even though the EUT may contain a non-standard connector, other connectors (i.e. at the antenna) appear not to be. If professional installation is being requested for this device, this requires a cover letter requesting and justifying how the applicant ensures professional installation to be provided. The letter should address the following 3 items:

a) Marketing
example:
The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers or have strict marketing control.
b) Requires professional installation;
examples:
- installation must be controlled.
- installed by licensed professionals (EUT sold to dealer who hire installers)
- installation requires special training (special programming, access to keypad, field strength measurements made) What is unique, sophisticated, complex, or specialized about your equipment which REQUIRES it to be installed by a professional installer?
c) Application
example:
-The intended use is generally not for the general public. It is generally for industry/commercial use.

Please refer to the document “MDS Response to ATCB.pdf” in which the manufacturer addresses these issues.

4) External photographs should also show the front of the unit. Please correct.

See “external view-top.jpg”

5) Maximum measured power was 741 mW, while the product literature and operational description cite 1 W. The FCC expects devices to be tested as worse case in maximum output level. Please explain/review/correct as necessary.

Please refer to the document "MDS Response to ATCB.pdf" in which the manufacturer addresses these issues.

6) The theory of operational also cites frequency hopping (page 3) while the application appears to cite DTS. Is this a hybrid transmitter? Are the modes discrete operation or simultaneous (hybrid). Please clearly denote what this device is and how it is being approved. Please refer to that attachment as well for guidance from the FCC. Please note that 2 discrete modes would require a composite application and much more additional information to support the frequency hopping requirements and theory.

Response: The theory of operation has been corrected. This is only a DTS device and not a hopper and all references to being a hopper have been removed.

7) While MPE calculations were provided, there is not a comparison to any limits, or explanation of results relative to required distances. Please correct.

Response: Calculations showing the exposure level at 20cm and the minimum separation distance (23cm) to meet the correct limits have been uploaded. The 23cm separation is also referenced in the user manual.

8) It appears that possibly 12.1 dBi applies to the yagi (from antenna information) or 12.2 dBi according to report, however we could simply be misreading all the data on antennas provide. Please clarify antennas covered by this application and please adjust the MPE as appropriate. Note much of the information provided showed antennas for different bands of operation, etc.

Response: I have highlighted the antennas that were used for the radiated spurious test. Revised antenna data sheets have been uploaded.

9) A lot of antenna information and data sheets were provided, but without guidance to the specific antennas being used. Please provide further information as necessary as the antenna information appears to cite many antennas that would not be applicable as well.

Response: Please refer to response# 8

10) Please explain the reference to 9.2 dBi, 2 dBd on page 8 of the report.

Response: That was a typo should have been 7dBd. It has been corrected.

11) There is not enough information to support actual lowest and highest tunable channel frequencies. Please provide further information as necessary.

Response: By looking at the Occupied bandwidth plots the data will show that the lowest frequency setting will be 902.8 MHz and the highest will be 927.5 MHz.

12) Note 2 on page 36 is incorrect or worded incorrectly regarding PSD testing. Please note that there are options and methods for power. You appeared to have used, Option 2, method 1. This would imply that PSD option 2 should be used. Please review/correct as necessary.

Power was measured using RB=VB=3MHz, with RB > EBW (26dB bandwidth = 1.5MHz), zero span and power averaging enabled with sample detector. This corresponds to Option 2, method 2 of the FCC's published methods. The test data note 1 has been corrected to reference the option and method correctly.

PSD was measured using option 2 to match option used for the power measurement. Note 2 beneath the PSD data table had been updated to reference the option rather than method.

13) Test photos only support Yagi tesing. Are photos for omni antennas available?

Response: Photos have been uploaded for the Omni antenna.

14) A users manual exhibit has yet to be provided, so FCC statements have not been evaluated (15.21, 15.105, RF exposure, etc.).

See "manual.pdf"

15) The device may also be considered a PC peripheral. However the device is not labeled using a DoC. How is the device being approved (DoC, Part 15 A Verification, or 15 B Certified). Note that this will affect labeling and manual expectations as well.

Response: Per the manual was tested as a Class A verification device. This device will only be used in industrial environments as per the manual statements. DoC is, therefore, not applicable.

16) Please provide clear understanding on how the device will comply with power levels and the 36 dBi limitation. Are all yagis, regardless of gain set to a single power level? How about omni antennas of gain >6 but < 9 dBi, what settings are used for power? Please provide further information as necessary. Additionally, this information should clearly be given in the manual for the installer (manual could not currently be reviewed). Please explain where this may be found. Additionally, if variable gain is used for yagi antennas, the spurious emissions must also be done for the yagi antenna that has the highest conducted power. Please review/correct/explain as necessary.

Response: see manual

IC

17) Labeling for IC should show proper IC number. Please correct.

Response: uploaded revised label

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18) The RSS-102 declaration have changed with the recent release of the new RSS-102. Please fill out appropriate pages from our current IC form (see attached).

Response: New RSS-102 form has been uploaded.

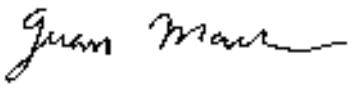
19) Please verify how they desire to list the model for IC. The form cites INETII, while the label of the device cites iNETII.

Please use iNETII

20) A users manual exhibit has yet to be provided, so IC statements have not been evaluated. However, please note that additional information is generally required when the device has removable antennas (RSS-GEN 7.1.4 and 7.1.5 require informing the user for any detachable antenna.).

See “Manual.pdf”

Regards,



Juan Martinez