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December 20th, 2005

**ATCB**  
**6731 Whittier Ave**  
**McLean VA 22101**

**Subject: Response to Dec 19th 2005 iNETII review questions**

**Applicant: Microwave Data Systems Inc.**  
**Product: MDS iNETII High Speed version of iNET**  
**(Note: marketing wishes the name with a lower case iNETII )**  
**Model: MDS iNETII**  
**FCC ID: E5MDS-iNETII**

Dear Timothy:

Thanks for your questions on the iNETII FCC grant. I hope these answers will satisfy your concerns.

Question:

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

Answer:

The firmware (software) upgrades will include things like, encryption support, Radius login, Customer specific serial interface software support, Security upgrades, Software bug upgrades etc.  
In all cases the operating frequency of 902-928MHz is limited to hardware and can't be changed by the end user. There is no control to the user that will allow the customer to operate the radio outside the certified operating range. The software control of selectable channels will only allow the user to operate in the range of 902-928MHz according to the FCC part 15 DTS rules.

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

Answer:

See pictures included.

3) Please explain compliance to 15.203 requirements.

Answer:

All MDS products are designed and marketed to business industrial customers, there are no cases in which our products are sold to the general public IE: consumer.  
Professional installation is required for 100% of our marketed products.  
MDS has a trained staff of professional field installers, trained Full Service Partners, and trained OEM customers that integrate our modular approved products into their OEM products.  
A, TNC connector is used for the RF interface, this is allowed by claiming professional installation.  
Our technical services department has certification courses for all our product's, all our service and installation personnel are certification trained.  
MDS is requesting professional installation for this version of the iNETII.

The existing approved iNET is FCC granted and this is listed as professional installation. The higher speed version of this radio (iNETII) will operate at speeds up to 1mbps.

If you wish to visit our corporate website, it clearly shows MDS is an industrial supplier of “high end” wireless solutions. [www.microwavedata.com](http://www.microwavedata.com)

At no time do we intend to sell goods to the general consumer.

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

Answer:

See pictures included.

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 worst case in maximum output level.

Answer:

The iNETII was tested and approved at 741mw under the DTS rules. This RF power is close to 1 watt in dBm terms, +28.69dBm, our software locks the forward power control to this limit and hardcodes this into RAM.

The text in our marketing data sheet will be changed to 741mw. See attached new iNETII data sheet

6) Labeling for IC should show proper IC number

Answer:

See pictures included of updated label

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

Answer: **(Note: marketing wishes the name with a lower case iNETII )**

The IC application attached has been updated to iNETII. For all future correspondence the lower case I should be used in the model string.

Thanks

8) MDS is requesting Professional installation for this iNETII product.

“Professional Installation attestation” the iNETII’s output power is reduced by the Professional installer when antenna gains exceed 9dBi are used to maintain compliance with the 36dBi power limitation

If you have any questions please feel free to contact me anytime.

Happy Holidays

Cheers

Dennis

Dennis McCarthy

Agency Compliance Engineer

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