

175 Science Parkway, Rochester, New York 14620 USA (585) 242-9600 Phone (585) 242-9620 Fax Aug. 1, 2003

Tri M. Luu, P.Eng.

Ultratech Engineering Labs Inc.

3000 Bristol Circle, Oakville, Ontario, Canada L6H 6G4

Subject: E5MDS-EL806 Modular approval change, to LMA "Limited Modular approval"

Dear Tri,

Microwave Data Systems is requesting that FCC ID E5MDS-EL806 grant for modular approval is updated to Limited Modular approval. All the supporting FCC and MDS email documentation is detailed at the end of this letter.

None of MDS's products are for sale to the general public, and are for Industrial applications only, examples, SCADA applications, traffic control, flow rate applications. Thus MDS has a trained staff of technical personnel that work with our industrial customers to ensure "professional installation" is achieved. In all cases the FCC EIRP limits are maintained.

When the Limited Modular approval is granted, MDS will perform training on it's staff, inform them of the change from Modular to Limited Modular, and list the technical differences to ensure it's staff keep the installations in compliance.

All the FCC module testing was performed with antennas that we currently list for professional installation of other MDS products. The antenna and cable interfaces, were simply changed to NON standard connector, and cable interconnects to fulfill the FCC's Modular requirements. All the antennas that will be used with the new Professional installation grant, will be installed by trained/qualified personnel to ensure the strictest compliance with FCC rules.

MDS is designing an adapter cable that will interface from MMCX (radio connector) to Bulkhead standard N connector, thus making this a Limited Modular Approval. Along with this cable will be instructions that will include(*the antenna installation instructions*) that will be shipped with the radio to our customers.

All supporting manuals and sales literature will be updated to reflect the regulatory issues that Joe Dichoso details in his email to me. The following text will be placed in the EL806 installation and user manual, and is being requested on the FCC grant.

"This device is only approved for use when installed in devices approved by third-party OEMs, or produced by the Grantee. The antenna(s) to be used with this limited modular transmitter must be installed to provide a separation distance of at least 23 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation and transmitter operating conditions for satisfying RF exposure compliance. Professional installation of this product is required."

If you have any queries, please do not hesitate to contact me at 585 242-8440: Yours truly,

Signed: Mennis McCarthy Name: Dennis McCarthy

Dennis McCarthy

Agency Compliance Engineer Microwave Data Systems 175 Science Parkway Rochester NY 14620

Phone (585) 242-8440

Email dmccarthy@microwavedata.com

Below is all the pertinent email information that support my request for LMA, Limited Modular Approval.

----Original Message-----

From: Joe Dichoso [mailto:JDICHOSO@fcc.gov]

Sent: Friday, August 01, 2003 9:48 AM To: DMcCarthy@microwavedata.com

Cc: Rich Fabina

Subject: Re: FCC Modular radio Question, I need your help

Hello Dennis,

This would require a Class II permissive change. We would afford the same interpretation with the same justifications provided in the Class II permissive change. You will need to justify why all of the approved antennas require professional installation(e.g. tower mounted) and you need to demonstrate how the grantee will maintain/control the installation of the module into products that are professional installed. The grant would be "limited" appropriately. Regards,

Joe

>>> McCarthy, Dennis 07/31/03 11:21AM >>>

Hi Joe

It has been a long time since I have requested your assistance, but I am in need of some clarification on the FCC Modular rules, Per DA 00 1407 Call me if you have any questions.

We have just gained FCC approval on a new modular part 15 ISM band 902-928 FHSS radio design, the EL806, FCC ID E5MDS-EL806. It currently has FCC modular approval by Ultratech and TIMCO. This new radio was tested with the EXACT same antennas that we offer for our PROFESSIONAL INSTALLATION products.

The only difference is the antennas were permanently attached to the cables which interfaced to MMCX pigtail cable. This filled the FCC modular rules and thus a modular approval was granted.

Our data radios are "not for sale to the general public" and are for "industrial applications only".

We have many industrial customers now requesting professional installation of this product because of the unique RF connector and cable make it hard to use and much more expensive. Based on this information, can we take the EL806 and change the grant to LIMITED MODULAR APPROVAL, and go to the TCB and ask for a CLASS 1 change, for professional installation, limited modular approval, on this FCC grant.

We will no longer offer non standard cable connectors, or the associated accessories. But offer only the PROFESSIONAL INSTALLATION antennas only, since they were already tested with non standard connectors and cables. The EL806 will no longer be called a module and it will become a professional installation LIMITED MODULAR APPROVAL in our manuals and on the FCC grant. We will not sell this to the general public.

There will be no new testing involved as stated, and it will just be paperwork. It certainly seems easier to apply for a class 1 change to rewrite the FCC grant, get the TCB approval and list LIMITED MODULAR ONLY ,PROFESSIONAL INSTALLATION REQUIRED.

Joe, I base this request on the fact that our competition "Freewave Technologies" just was granted a permissive change in March 2003 to a "Limited Modular Approval" radio which has professional installation, and it is a OEM board solution FCC ID KNY-6231812519. This is drastically competing with us and puts us at a unfair competitive disadvantage. Here is the text off the grant

"This device is only approved for use when installed in devices produced by the Grantee or Grantee approved third-party OEMs. The antenna(s) to be used with this limited modular transmitter must be installed to provide a separation distance of at least 23 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. This device must be installed in NEMA enclosures. End-users and installers must be provided with antenna installation and transmitter operating conditions for satisfying RF exposure compliance. Professional installation of this product is required"

All I am asking from you Joe is, to have the "Modular Approval" changed to "Limited Modular Approval" and allow us to compete fairly in the marketplace by offering the radio with Professional Installation. Thus we do NOT have to stock, offer non standard RF connectors and antenna connections. We propose shipping a MMCX to N pigtail cable with the professional installation LMA approval if you find my request valid.

Please call me if I have clarified my thoughts clearly enough for you.

Thanks Joe

Regards

Dennis

Dennis McCarthy
Agency Compliance Engineer
Microwave Data Systems
175 Science Parkway
Rochester NY 14620
(585) 242-8440
email dmccarthy@microwavedata.com