From: Roland Gubisch ES-Box

Sent: Thursday, October 09, 2003 1:17 PM

To: Monica Roos ES-STO
Cc: Danielle Fontaine ES-Box

Subject: RE: Application review of TagMaster FCC ID: M39S15XX

Monica,

Thank you for your reply. I have reviewed your comments and note the following:

ADMINISTRATIVE

- 1) The stated text in the User Manual and Installation Guide does not refer to "changes or modifications voiding the user's authority..." The phrase given in 15.21, or something similar, should be added.
- 2) The PCB photos you reference were not attached. Please re-send.

TECHNICAL

- 1) This is accepted.
- 2) It is not clear from the user manual that the host computer is used for configuration only, but it is reasonable and acceptable. However, there are also relay and open collector outputs to actuate external alarms or counters. Wires do not appear to have been connected to these I/O ports during testing, as required by ANSI C63.4:2001 clause 6.1.3. Please comment.
- 3) Thank you for the manual/guide references. Neither document prohibits the connection of the DC supply to the AC mains, so AC conducted emissions should be measured with a representative commercial AC adaptor. If both internal DC/DC power supplies are identical, only one needs to be tested wit the AC adaptor.

Regards, Roland

-----Original Message-----

From: Monica Roos ES-STO

Sent: Thursday, October 09, 2003 9:40 AM

To: Roland Gubisch ES-Box **Cc:** Danielle Fontaine ES-Box

Subject: SV: Application review of TagMaster FCC ID: M39S15XX

Hi Roland,

Please find our comments to you noted items:

Administative

- 1) Please see page 7 in the manual 51027803 [TagMaster HW Installation Guide] for S1500 and page 9 in 03-074 01 S1566 User Manual for S1566. The text describes that all service and handling shall be done by specially trained personal etc. Are you satisfied with the stated text or do Tagmaster need to include more?
- 2) See enclosed internal photos
- 3) The FRN number for Tagmaster AB is 009609439 (you asked for the number i an other e-mail sent 15 Sept. 2003)

Technical

1) The customer is aware of this policy.

- 2) The RS-232 and RS-485 ports are only service ports.
- 3) Regarding the AC conducted emission measurement we have questions for you.

Please see page 5 in the manual 51027803 [TagMaster HW Installation Guide] for S1500 and page 7 in 03-074 01 S1566 User Manual for S1566 for pictures of the use of the products.

The S1566 will be powered from different souces due to the way it is used. The S1500 is powered from a power supply (24 VDC) according to the picture in the Installation guide for S1500.

Do we need to performed the AC conducted emission measurement on both products or is it enough if we perform the test S1500 using a typical power supply.

Since we need to perform some kind of retesting due to the last item above a quick answer from you is appreciated.

Have a nice day!

Vänliga hälsningar / Best regards Monica Roos

-----Ursprungligt meddelande----Från: Roland Gubisch ES-Box
Skickat: den 15 september 2003 20:44
Till: Monica Roos ES-STO
Kopia: Danielle Fontaine ES-Box

Ämne: Application review of TagMaster FCC ID: M39S15XX

Monica,

Review of this application for certification is complete, and the following items are noted:

ADMINISTRATIVE

- 1) It is required in the user manual to include a statement conforming to 15.21: "The users manual or instruction manual...shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment." I cannot find a statement similar to this in either the S1500 or S1566 manuals. Please indicate where the statement may be found, or add it accordingly.
- 2) Internal photos: 2.1033(b)(7) requires a photo for both sides of each PCB. It is not apparent that internal photos provided for S1500 or S1566 comply. Please comment.

TECHNICAL

1) Please note the FCC policy regarding Field Disturbance Sensor (FDS) tag readers: "Data transfer is possible **only** with FDS systems using passive tags and **only** if the data transfer function is ancillary to the primary purpose of a FDS system which is the detection of the presence of people or objects." The TagMaster equipment appears to satisfy this definition, in that it behaves as a motion or presence detector whether or not any data transfer occurs. The applicant should be aware of this policy, and may wish to comment.

- 2) Test set-up, test report section 3.3: there is no mention of the RS-232 or RS-485 communication connection which appears to be essential to the operation of this card reader, nor any other signal or I/O ports. ANSI C63.4 calls for one port of each type to be populated for the purpose of emissions testing. Please comment.
- 3) AC conducted emissions data appears to be absent. Please note Part 15 section 15.207(c) requires for intentional radiators that: "Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power line indirectly, obtaining their power through another device which is connected to the AC power lines, *shall be tested* to demonstrate compliance with the conducted limits." Unless it can be shown that this device will never be connected to the AC mains with an adaptor or AC supply, conducted emissions data is needed. (An off-the-shelf AC adapter should be used.) Please comment.

The application can proceed to certification as soon as these issues are addressed.

Thank you, Roland Gubisch