

Return address: P.O. Box 15, 9822 ZG Niekerk, The Netherlands

ATCB
Attn.: Mr. Timothy R. Johnson
Examination Engineer
6731 Whittier Avenue, Suite C110
McLean, Virginia 22101
USA

Smidshornerweg 18
P.O. Box 15
9822 ZG Niekerk
The Netherlands

www.tuv-eps.com

T +31 594 505005
F +31 594 504804
E info@tuv-eps.com

Subject
Cover letter

Date
November 17, 2008.

Our reference
21_CGDTRANSED_2nd_
comments-and-answers

Your reference
ATCB006892

Page
1 of 1

Our General Terms and Conditions, as filed at the Chamber of Commerce in Groningen, are applicable to all orders given to TÜV Rheinland EPS B.V.

TÜV Rheinland EPS B.V. is registered at the Chamber of Commerce in Groningen with no. 27247331.

Dear Mr. Johnson,

Related to your comments based on our request for certification for the following product,

FCC ID : CGDTRANSED
Brand : Nedap
Model : TRANSIT EDGE WIRELESS
Description : A field disturbance sensor operating on 2,4 GHz extended with a point to multipoint long range wireless Ethernet radio-data link module with FCC ID: R4N-AW900M designed to work in the frequency band 902-928 MHz.

we would like to provide you with the following information:

Question 1:

Because of the mixed information given throughout several documents, regarding previous comment 1) we are simply trying to confirm that the antenna connectors being used here as integrated into the NEDAP device are non-standard (i.e. Reverse polarity or Reverse sex). For instance the photos for the AW2 just provided appear to be TNC (unsure what style), while the report information shows SMA (Reverse polarity is specified), etc. However regardless of their information, the original Certification documentation for the module only supports approval for use with the non-standard connectors and this also appears to be supported in their documentation (brochure). Therefore we are simply trying to confirm that the external TNC connector utilized as integrated in this application for NEDAP are non-standard connectors (i.e. RP-TNC). Please confirm.

Answer 1:

Yes they are reverse polarity. I think the confusion is between the spec and the picture. So to clarify, the board has a Reverse Polarity SMA (RP-SMA). The housing has a Reverse Polarity TNC (RP-TNC).

A small cable (RP-SMA to RP-TNC) which is shown in the picture is used to connect the board (RP-SMA) to the housing. The RP-TNC on the end of the cable is the RP-TNC that users have access to at the housing. All of AvaLAN's antennas use a RP-TNC connection.

So, the 2nd co-located TX is mounted fully in line with the instructions provided by the supplier of the RF module.

The model name S467AH-915S is identical to the model AW2, the model name used in the documents.

Question 2:

While we understand the concern raised in response to item 3). However kindly note that concerns stem from the fact that with the current photographs provided, we can not verify that the TX stated as being used matches what is approved on the FCC site for the module being integrated. For instance, this application cites that the module being integrated is FCC ID: R4NAW900M.

However all photographs under this FCC ID clearly show this EUT as mounted vertically with respect to the associated boards and its form factor has 2 rows of pins that connect to the associated digital boards (which do not appear to be present in the version being integrated). Additionally labeling positioning in that application appears on the back of the board which would appear to not be visible in the device as currently shown in this application because that side is mounted flush to another board. Through investigation, it is noted that there is also a AvaLAN module certified under a nearly identical FCC ID of R4N-AW900MR – which appears much more similar to the device that is being integrated here. However neither of the approved modules above appear to match the device being integrated given current sets of photographs. This fact is what has spawned the concern. From what can be determined, the width of the TX board itself given in this application is about 1.5 x the board width of R4N-AW900M, but about 50% less than R4N-AW900MR. Therefore a photograph of the label showing the FCC on the integrated TX may be helpful.

Answer 2:

The changes made from the original radio transceiver board (AvaLAN certification R4N-AW900M) to what they are trying to test are minimal. The only change to the board layout was to make a more mechanically stable connection between the two boards. Electrically the radio transceiver board in the R4N-AW900M is identical to the current radio transceivers you are using. Also the physical layout underneath the shield and the Bill of Materials for each board are identical as well.

This answer was received from the manufacture of the RF modem:

Mr. Jason Hennig
AvaLAN Wireless Systems Inc.
p (650) 206-2321
f (650) 249-3591
jhennig@avalanwireless.com

Question 3:

Section A.2 of the manual suggests use of a 15 dBi antenna. Manual is expected to match device being Certified. Currently application does not cover this antenna.

Answer3:

All references to the 15 dBi antenna have been removed from the manual. The revised manual has been added (15_CGDTRANSED_User_Manual_mod2.pdf)

Question 4:

Regarding your concern about 15.105 information, please note that the device is subject to all applicable rules. The device consists of TX's, RX's, and digital device circuitry (Either Class A or Class B as appropriate pertains to the digital circuits). RX's and digital device are subject to 15B requirements.

Answer 4:

We have taken good notice of your remark.

Note:

Note - Also it does not appear that complete photographs of the board(s) located in the "top cover" that contain antenna and other circuitry are provided (board 7815123)

Answer on your note:

The document containing the interior photo's has been updated and attached.
see 09_CGDTRANSED_Internal-Photograps_mod2.pdf

Date

November 17, 2008

Our reference

21_CGDTRANSED_2nd_comments-and-answers

Your reference

ATCB006892

Page

2 of 2

Best regards,
TÜV Rheinland EPS B.V.



P. de Beer
Approvals & Quality Manager

Date
November 17, 2008

Our reference
21_CGDTRANSED_2nd_comments-and-answers

Your reference
ATCB006892

Page
3 of 3