

# TIMCO ENGINEERING INC.

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## TCB & FCB

*FCC Approvals*  
*Industry Canada Approvals*  
*Notified Body for Europe*

12/3/2007

MR. SHAIKE RAZ  
ISRAEL TESTING LABORATORIES  
972-897-9779 x9 972-897-9770 x2  
SRAZ@ITL.CO.IL

SUBJECT: MOBILE ACCESS NETWORKS - FCC ID: OJFMA86WCE

REFERENCE: JOB 3674IC7

Dear MR. RAZ:

**This application is on hold until these questions are resolved.** Please answer all question(s) together and only respond to [tei@timcoengr.com](mailto:tei@timcoengr.com). Any other method will cause **unnecessary delay**.

**DO NOT HIT REPLY!** Your response should be sent ONLY to [tei@timcoengr.com](mailto:tei@timcoengr.com). Any additional exhibits that are sent should be UPLOADED at our web site – please do not attach files to your email. Responses should also contain the job number, applicant name and FCC ID of the device. If an acceptable response is not received within 2 weeks the job will be closed & there will be additional charges to reopen.

**ANSWER ALL QUESTIONS.** Be sure to number or identify your answer with the corresponding question. If you are referring to another document, be sure to give the page number and paragraph reference where your response can be found.

Based upon our review of this application we have the following questions:

1. Part 15.204(d): It appears that this device is an external radio frequency power amplifier (ERFPA) designed to be connected to a companion transmitter (AP) to its input and to an antenna to its output. Please confirm that this device is not intended to be used as a repeater (A Part 15 repeater is a device that is intended to re-radiate an input signal by demodulating, re-shaping or re-timing the signal; and/or perform a combination of any of these functions, on a radio frequency input signal. A Part 15 repeater is a device intended for re-transmission of information that ensures the elimination of re-transmissions of any input noise or any other unwanted signals. These devices can be approved under the following conditions)

2. Please confirm the correct FCC ID for this application. The FCC ID listed on the 731 form and the Label Sample and the Test Reports are different. Please advise which is correct and send the required revised documents. Thanks.
3. **LABEL LOCATION:** Please provide us with a photo showing where the label will be placed. (see item 4. below)
4. Please provide information showing compliance with 15.204(d)(1) and (d)(2).
5. This device appears capable of amplifying Cellular/PCS devices, please explain compliance with part 22 and 24.
6. 731 Form: Please list only the maximum output power measured for this device. There should be only one line item. Also, the power listed must agree with the maximum conducted output power listed in the test report.
7. 731 Form: Please list only the lowest and highest frequency tested and that will be authorized for use with this device.
8. Internal photos: The photos are blurry when zooming in. Please provide photos with a better resolution. We should be able to read the labels/silk screen info... when we zoom in.
9. Test reports: The FCC does no longer accept (November TCBC/FCC conference call) one test report with data for both NII and DTS bands. There must be a separate report for each equipment class. In other words, there must be one report for DTS (15.247) data and one report for NII (15.407) data. Please submit separate test reports.
10. Testing: NII bands – part 15.31(m): This section requires testing at 3 places in the band. The FCC recently reminded TCBs to make sure that this requirement is also satisfied for NII devices. Testing 3 channels in each band is required. Please revise test reports.
11. Part 15.247(c) - Field strength of spurious radiation (radiated emissions): No data was found for this requirements in test report "860M With WCE E76410 TestRpt.pdf". Please refer to  
[https://fjallfoss.fcc.gov/prod/oet/forms/blobs/IDBtrieve.cgi?attachment\\_id=20422](https://fjallfoss.fcc.gov/prod/oet/forms/blobs/IDBtrieve.cgi?attachment_id=20422) page 4/6pdf.
12. All test reports - Band-edges: Compliance at the band-edge above 2,483.5MHz requires compliance with the limit of 15.209 according to 15.205. That is the band 2,483.5MHz is restricted. The data must show that the device complies with both Peak and average limits respectively 74dBuV/m and 54dBuV/m per part 15.35(b). Please revise test report. Please follow this method prescribe by the FCC  
<http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20476&switc=P>
13. All test reports - Band-edge at 5.250GHz when operating at 5.240GHz: Per 15.215(c) Please show compliance with the 20dBc bandwidth requirement. (You can also use this method  
<http://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20476&switc=P>)
14. Part 15.407 - Field strength of spurious radiation (radiated emissions): No data was found for this requirement in test report "860M With WCE E76410 TestRpt.pdf". Please explain.

15. Test reports – tester name: This information has not been consistently provided for some of the tests.
16. User's manual – section 1.4: This section describes various installation configurations for this device. It appears that only the stand-alone configuration was tested. Please explain or remove references to other configuration not supported at this time. Please revise manual.
17. User's manual – section 1.6.2: Please revise and update the list of authorized antenna.
18. User's manual – page 20/69pdf: Please revise the information about approved APs.

Additional information may be required based upon your reply to the above questions.

Sincerely,

Bruno Clavier  
Timco Engineering, Inc.