



ALPS ELECTRIC CO., LTD

HEAD OFFICE :1-7, YUKIGAYA OTSUKA-CHO, OTA-KU, TOKYO, 145-8501 JAPAN
PHONE:(03)3726-1211 FACSIMILE:(03)3728-1812

COMMUNICATION DEVICES DIVISION, SOMA PLANT

1-2-1, OKINOUCHI, SOMA-CITY, FUKUSHIMA-PREF., 976-8501, JAPAN
PHONE:+81-244-35-1207 FACSIMILE:+81-244-35-1602

Date: January 26, 2004

Federal Communications Commission
Equipment Authorization Division
Application Processing Branch
7435 Oakland Mills Road
Columbia, Maryland 21046

Subject: Modular Approval (MA) Attestation for Bluetooth™ Transceiver Module,
Model UGPZ5, FCC ID: CWTUGPZ5

Gentlemen:

We have the following attestation to the eight requirements described by FCC public notice DA00-1407 "Part 15 Unlicensed Modular Transmitter Approval".

1. RF shielding.

The model, UGPZ5 Bluetooth™ transceiver module (hereinafter "module") has an own RF shielding.

The shielding is made by metal and completely added to RF part during our manufacturing. It is not easily removed from the completed module.

Please refer to the assembly drawing and an external photograph.

2. Excessive data rates or over modulation.

The module circuit buffers all modulation and control of the transmitter.

The control of the transmitter is via data commands and software instructions contained within the module.

The transmitter is tested with the module operated at the maximum power. Data commands are reduced the power of transmitter but do not influence the modulation contents.

3. Power supply regulation.

The module has its own power supply regulator to insure compliance with part 15 requirements regardless of the quality or level of external DC supplying the module from the end product.

Please refer to the attached schematics and diagrams.

The regulator operates within the +3.3Vdc +/-0.2V range.

The test report shows the operation of the module across a voltage range of +3.1V to +3.5 volts.

4. Antenna and unique coupler requirements to antenna connector.

The 1/4 wave monopole antenna consists of chip antenna, unique antenna connector and the PCB. The RF cable having unique connector on the both end is used for connection between the antenna and the module.

The reversed "F" type antenna consists of metal type antenna. The RF cable having unique connector is used for connection between the antenna and the module.

Please find "Declaration concerning Antenna Specification" for detail.

Those connectors meet the unique coupler requirements of 15.203 of part 15.

We specify the following meaning to "User Guide Information" for OEM inserted into the user manual to comply with 15.204 (C) of part 15 for end product.

- (1) No modification of antenna will be allowed.
- (2) The end product must be certified by FCC, if customer will use the unique antenna.

5. Stand-alone configuration

The modular transmitter has been performed the testing as a stand alone and then confirmed the compliance. Please refer to the Test report. (No.24FE0040-HO-1)

6. Label with own FCC ID number and exterior label.

The module is labeled with own FCC ID number. Please refer to the drawing of label and an assembly drawing for its location on the module.

The label made by polyethylene terephthalate (PET) sheet is affixed to the module by a high-strength adhesive.

Since the FCC ID number will not be visible when the module is installed inside the end product, there are instructions given to our customers on how to apply the exterior label.

Please refer to the OEM installers guide..

7. Compliant with any specific rule or operating requirements.

The module as manufactured is completely controlled by the onboard processor. There are no influences to the operation of the transmitter the end user can induce that will operate the module outside of scope of the regulations. The necessary explanation for user to be complied with this requirement is contained in the manual.

8. RF exposure requirements.

This module may be installed into any end product both mobile and portable applications. Because the module only radiates very low power levels, it complies with RF exposure requirements.

According to Supplement C, Edition 01-01 to OET Bulletin 65, Edition 97-01 spread spectrum transmitters are categorically excluded from routine environmental evaluation because of the low power level, where there is a high likelihood of compliance with RF exposure standards.

Sincerely yours,

Signature:



Name: Masaaki Ueki

Title: Compliance Team Leader

Company: Alps Electric Co., Ltd Communication Devices Division