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Reference: FCC ID: JUP-5580090 and Industry Canada: 1756A-5580090

Gentlemen:

The enclosed documents constitute a formal submittal and application for a Grant of Equipment Authorization pursuant to Industry Canada RSS 210 and Subpart C of Part 15 of FCC Rules (CFR 47) regarding intentional radiators. Data within this report demonstrates that the equipment tested complies with the FCC and Industry Canada limits for intentional radiators and receivers.

The scope of the certification is for the Trimble part number 55800-90 sold under the Trimble model numbers SPS850, SPS750 and SPS550. This part number is for a base unit (GPS receiver and digital device with integrated Bluetooth module) with a 900 MHz FHSS radio option. The different model numbers refer to software-enabled options related to GPS positioning that allow access to features such as different GPS bands, data logging capabilities and CMR (GPS data packet) input and output.

The certification is to be associated with the 900 MHz transceiver and the integrated Bluetooth transceiver. Although the Bluetooth transceiver has FCC modular approval (FCC ID: Q23 31307), Trimble are using an antenna that is not included in the scope of that modular approval and the module does not have a Canadian approval For this reason the application for FCC ID JUP-5580090 includes assessment of both Bluetooth and 900 MHz frequency hopping operation.

Compliance of the Bluetooth transceiver is to be demonstrated using a test report covering all aspects of the device operation with the Trimble antenna. This test report covers testing with the device tested as a module, outside of a host enclosure. Compliance of the 900 MHz FHSS transceiver is demonstrated though a test report

As the quantity of files to support this application is large, they are listed here.

| Letters | Cover Letter.pdf FCC Agent Authorization_SPSx50.pdf IC Listing acknowledgement_Trimble SPSx50.pdf Trimble 900 MHz Radio - ATCB Q&A.doc 1756A-5580090 Model Names2.pdf ATCB Response 022706.doc ATCB Response 030606.doc SPSx50 & NetR5 Models and Part Numbers.doc | Clarification of 900 MHz operational description Clarification of model names and similarities Response to first series of questions raised by ATCB Response to second series of questions raised by ATCB Clarification of model names and similarities |
|----------------------|---|--|
| Forms | ATCB Agreement form_Trimble SPSx50.pdf IC Application UPN 1756A-5580090.doc ATCB Form 731 Bluetooth.doc ATCB Form 731.doc | Contains the correct model number to be listed |
| Reports | Bluetooth report.pdf R61810 _900 MHz_revised.pdf | Test report for Bluetooth module with Trimble 4dBi antenna Test report for 900 MHz FHSS |
| Test Photographs | Test Configuration photos 900MHz GPS.pdf Bluetooth Test Photos.pdf | |
| External Photos | External pics.pdf | |
| Internal Photos | Bluetooth 1 of 3.jpg Bluetooth 2 of 3.jpg Bluetooth 3 of 3.jpg 900MHz front.jpg 900MHz back.jpg SPSx50 55800-90 back panel.jpg SPSx50 900 MHz radio board back.jpg SPSx50 900 MHz radio board front.jpg SPSx50 955800-90 back panel assembly.JPG SPSx50 front panel assembly.JPG SPSx50 Main Board back.jpg SPSx50 Main Board front.jpg SPSx50 main board with 900 MHz radio board assembly.JPG | |
| Block Diagrams | Infineone PBA 31307 Bluetooth Module Block Diagram.pdf Main System Blk Diagram.pdf | Bluetooth block diagram Main block diagram, including GPS |
| | 900 MHz Radio Block Diagram.pdf | receiver 900 MHz FHSS block diagram |
| Label Information | 55800-90 Label.pdf | |

| RF Exposure Information | MPE Calculation (BT and 900).pdf | |
|-----------------------------|---|---|
| | RSS102 form.pdf | |
| Schematics | SPSx50 Schematics main board 55212-XX- SD-B-R4.pdf | Includes Bluetooth module |
| | SPSx50 Schematics radio board 53195-XX- SD-A+2.pdf | 900 MHz radio board |
| Manuals | SPSx50 User Manual Addendum.pdf SPSx50_ModularGPSRcvr_UserGuide pt 1 of 2.pdf | |
| | SPSx50_ModularGPSRcvr_UserGuide pt 2 of 2.pdf | |
| Operational Descriptions | Theory of Operation - Trimble SPSx50.pdf | |
| | Trimble 900 MHz Radio - Theory of Operation.doc | |
| | Former Oper Description.pdf | Infineone PBA 31307 Bluetooth Module Product Specification sheet |

Note that a separate application will be submitted for both Industry Canada and FCC certification for part numbers 55800-00 (the base unit with Bluetooth transceiver) and 55800-62 and 55800-66 (base unit with Bluetooth and the two UHF options) under FCC ID JUP-5580090 and IC # 1756A-55800.

Elliott Laboratories, as duly authorized agent prepared this submittal. A copy of the letter of our appointment as agent is enclosed. If there are any questions or if further information is needed, please contact Elliott Laboratories for assistance.

Sincerely,

Mark Briggs