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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 through 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	Clarification of 900 MHz operational description
	1756A-5580090 Model Names2.pdf	Clarification of model names and similarities
	ATCB Response 022706.doc	Response to first series of questions raised by ATCB
Forms	ATCB Response 030606.doc	Response to second series of questions raised by ATCB
	SPSx50 & NetR5 Models and Part Numbers.doc	Clarification of model names and similarities
	ATCB Agreement form_Trimble SPSx50.pdf	
	IC Application UPN 1756A-5580090.doc	Contains the correct model number to be listed
	ATCB Form 731 Bluetooth.doc	
	ATCB Form 731.doc	
Reports	Bluetooth report.pdf	Test report for Bluetooth module with Trimble 4dBi antenna
	R61810 _900 MHz_revised.pdf	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	Bluetooth block diagram
	Main System Blk Diagram.pdf	Main block diagram, including GPS receiver
	900 MHz Radio Block Diagram.pdf	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
Principal Engineer