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Attn: Reviewing Engineer
Federal Communications Commission
7435 Oakland Mills Road
Columbia MD 21046

RE: Modules Description for GNSS Receiver/S320 & FCC ID# ZC8S320

To Whom It May Concern:

In the S320 product there are 3 modules used for transmitting and/or receiving data. They are the GSM, UHF radio and Bluetooth module. Either the GSM or UHF radio is used on the S320 product, NEVER both simultaneously.

GSM module

The GSM module (**FCC ID: R17GE865**) with the aid of an internal antenna is used to receive correctors data sent via NTRIP servers. The received data from the NTRIP server is used to correct the GPS solution received in the S320 product, for centimeter accuracy position.

UHF Radio Module

The UHF radio is an off the shelf module is used to transmit GPS RTK data if it is configured at a base or receive GPS RTK data if it is setup as a rover. The RTK data is used correct the GPS solution received in the S320 product, for centimeter accuracy position. The product will be sold in Europe with a 400MHz UHF radio (**FCC ID: NS909P30**) and with a 900 MHz UHF radio (**FCC ID: NS908P24**) in North America. There are 2 external antennas, respective, used for the 400 MHz and 900 MHz radio modules. The ¼ wavelength whip antenna used for the 400 MHz is rated at 0dBi. The external centre fed dipole antenna used for the 900 MHz radio is rated at 2 dBi.

Bluetooth Module

The Bluetooth module (**FCC ID: ED9LMX9838**) us a one chip solution and is used in the field in conjunction with a Bluetooth equipped handheld to query the status and, when required, for configuring and monitoring the S320 unit.

Sincerely,



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