STONEX S9GNSS is a survey device with Bluetooth communication module, the master control chip is STM32F103VX with an external 8MHz oscillator, and it is wireless communication between the external terminal through Bluetooth wireless transmission technology, and it is connected to PC through USB port or RS-232 port.

Processing the data transmission between bluetooth module,data link module,GPS decode module .Controlling of man-machine interface,USB,RS232connector;machine operation d.File management of FLASH, recording function, The function of GPS decode module is decoding the GPS signal,sending the relative GPS information on the basis of 0183 standard.

Bluetooth module supply the connection with industrial PDA, users can inquire the receiver status information and do controlling, and professionally apply the information.

For the Bluetooth module, the transmission data modulated the CPU(DSP which gets a digital modulation then passing through the CPU, working with 40MHz crystal for producing a signal to the RF module circuit carrying wave amplified by the amplifier and filter circuit unit, through the antenna then transmit out as 2402MHz to 2480MHz

- 1. DSP is the main functional control center, working with 40MHz crystal, deal with function control and other indication.
- 2. Tine frequency is a multiplied frequency to produce an extract HF signal.
- 3. RF module is used for producing digital modulation FHSS type.
- 4. The survey device collects the data by the receiver module and save in the FLASH, and then users can downloading the data by USB port.