

Bluetooth module.

Basic information:

(Hardware version: 0x01)
Bluetooth 2.1 (Serial Port Profile)
UUID: 00001101-0000-1000-8000-00805F9B34FB
Default PIN: 1234 (can be changed by user since 0.97 firmware)

(Hardware version: 0x02)
Bluetooth 4.0
Serial service: 0000ffe0-0000-1000-8000-00805f9b34fb
Characteristic descriptor: 00002902-0000-1000-8000-00805f9b34fb
RX/TX characteristic: 0000ffe1-0000-1000-8000-00805f9b34fb
Default PIN: not set (can be changed by user,)

Baud rate: 115200bps
Data bits: 8
Stop bits: 1
Parity: None

Requirements:

InputStick BT2.1: your platform must allow to establish Bluetooth connection, use Serial Port Profile, read and write individual bytes.
InputStick BT4.0: your platform must allow to read/write RX/TX characteristic.

Data throughput:

Data transfer rate between MCU and BT module: 115200bps. BT2.1 can achieve transfer rate very close to this value, BT4.0 is usually 3-4x slower.

Latency:

InputStick BT2.1: in most cases you should expect approximately 50ms latency between sending a request and receiving response. However in some situations (low signal strength, interference), latency can even exceed 1000ms. Avoid requesting response if possible.
InputStick BT4.0: in most cases latency will not exceed several ms.

Security:

Use Encrypted Bluetooth connection if possible.

Example (Java, Android):

```
(...)  
BluetoothDevice mAdapter.getRemoteDevice("30:14:07:31:14:68");  
device.createRfcommSocketToServiceRecord(MY_UUID); //...The remote device will be authenticated and  
communication on this socket will be encrypted...  
(...)
```

You can also apply AES-128 based encryption and authentication on protocol level.