

# **ES210**

# **1.General Description**

ES210 is a BLE OBDII device. It is externally designed to mimic a standard automotive OBD port, yet it's essentially a BLE unit discreetly packaged as such. It can read car's CAN information like VIN,RPM,MIL,DTC and send CAN data to its mother device ES400B via BLE.



## 2. Main Functions

- Invisibility: Resembling an ordinary OBD port, it's a functional BLE unit. ES210 allows to connect other external OBDII equipment, like OBD diagnostic tool, ELM327.
- **BLE Report:** Report CAN data to its mother device ES400B via BLE.
- **Auto Pairing:** Advertises via BLE with a configurable advertising interval upon powering up to enable pairing with ES400B.
- CAN Request: Upon receiving CAN data requests via BLE from ES400B when ignition is on, ES210 forwards the requests to OBDII, retrieves CAN data from vehicle ECUs, and transmits raw data back to ES400B over BLE.
- **CAN Protocol Self-selection:** Supports four CAN bus initialization modes, combined by identifier length (11-bit/29-bit) and baud rate (500k/250k), and features a mode memory function to automatically resume the last used mode on next startup.
- **Sleep Mode:** Upon detecting virtual ignition off, ES400B triggers ES210 via BLE to enter deep sleep for energy conservation.
- Parameter Configurable: Various parameters can be configured via the dedicated mobile application.
- **OTA (Over the Air):** ES210 can connect with dedicated mobile application and upgrades firmware over BLE.

# 3. Specification

### **Physical and Electrical**

Dimensions: 50.2mm \*37.75mm \*22mm

Weight: 36g

Power Consumption:

-Work Mode:< 5mA@12DC -Sleep Mode:< 1.3mA@12DC

(\*Under Optimization)

Operation temperature: -20°C to +65°C Storage temperature: -40°C to +85°C

Antenna: Built-in BLE antenna

### **Comprehensive IOs**

CAN-BUS: ISO15765 (11/29Bit 250/500K)

#### **Protocol**

Bluetooth 5.0