## 1.Bluetooth Service Definition[DISCOVERABLE]

1) Advertising Data in DISCOVERABLE CONNECTABLE

Service UUID 0xFFE0 in the complete or more service segment.

Manufacturer data: <0xff,0xff><0xc0,0xff><0x09>

Eg.:

 $\{0x02, AD\_TYPE\_FLAGS, FLAG\_BIT\_LE\_GENERAL\_DISCOVERABLE\_MODE | FLAG\_BIT\_BR\_ED\_RNOT\_SUPPORTED,$ 

0x05,AD\_TYPE\_16\_BIT\_SERV\_UUID,0xdd,0xff,0xe0,0xff,

0x06,AD TYPE MANUFACTURER SPECIFIC DATA,0xFF,0xFF,0xC0,0xFF,0x09};

2) Service UUID:

0xFFE0

3) Characteristic:

UUID	property	description
0xFFE1	Write	Smart device use to send message to sensor
0xFFE2	Notify	sensor use to send message to Smart device
0xFFE3	Write	Smart use to send HomeID/password to sensor

Set meshinfo:

Write to 0xFFE3(9 bytes): 0x01,id,password[4]

## 2.Advertising data in WORKING\_ADVERTISING

1) SM-->sensor:

 $length, AD\_TYPE\_MANUFACTURER\_SPECIFIC\_DATA, 0xFF, 0xFF, 0xC0, 0xFF, 0x10, 0x01, 0x00, 0x00, 0x00, 0xff, 0x$ 

0x01,0x00,0x00,0x00 :id

0xff,0xff,0xff,0xd7,0xac,0xf0:sensor's public address

If legal,user\_data will be delivered to application layer.

Eg,.

 $0x12, AD\_TYPE\_MANUFACTURER\_SPECIFIC\_DATA, 0xFF, 0xFF, 0xC0, 0xFF, 0x10, 0x01, 0x00, 0x00, 0x00, 0xff, 0xff, 0xff, 0xff, 0xd7, 0xac, 0xf0, 0x01, 0x84$ 

Send data to the sensor <0xff,0xff,0xff,0xd7,0xac,0xf0>, if the sensor own the id 0x00000001, the application layer will receive the data: 0x84

Note:seq is added to avoid repeated data.

2) Sensor-->SM:(ack)

 $0x0a, AD\_TYPE\_MANUFACTURER\_SPECIFIC\_DATA, 0xFF, 0xFF, 0xC0, 0xFF, 0x11, seq, 0x01, 0x02, 0x03, 0x02, 0x03, 0x02, 0x03, 0x04, 0x04,$ 

Seq is the seq received in the data from SM.0x01,0x02,0x03 is the response data.