## APPENDIX: SOURCE CODE

```
#include
#include
#include
#include
SoftwareSerial mySerial(8,9);// RX,TX
intflag=0;
Stringhbeat="";
inta=50;
floathr=0;
floatsp=0;
charch;
Stringdata;
Stringwdata;
Stringdata1="";
charenet[10]=",CONNECT";
StringapiKey="VGHY5JI0P5LUOBJJ";
inttcount=0;
intcount=0;
inth=0;
intv1=7;
intv2=6;
voidsetup()
          Serial.begin(9600);
              pinMode(13,OUTPUT);
              pinMode(10,INPUT);
              pinMode(11,INPUT);
              mySerial.begin(115200);
              mySerial.print("AT\r\n");
              delay(1000);
              mySerial.println("AT+RST");
              pinMode(11,INPUT);
              pinMode(10,INPUT);
              pinMode(v1,OUTPUT);
              pinMode(v2,OUTPUT);
              digitalWrite(v1,1);
              digitalWrite(v2,1);
              Serial.println("AT+CNMI=2,2,0,0,0");
              digitalWrite(13,1);
              delay(700);
```

```
digitalWrite(13,0)
       delay(700);
        digitalWrite(13,1);
        delay(700);
       digitalWrite(13,0);
       digitalWrite(v1,0);
        delay(200);
        digitalWrite(v1,1);
        delay(2000);
intscount=0;
voidloop()
       digitalWrite(13,0);
        if((digitalRead(11)==1)||(digitalRead(12)==1))
        tcount++;
if(count>12)
       count=0;
delay(1000);
if(tcount>10)
        tcount=0;
       if(analogRead(A0)>3.8)
        send_alert();
digitalWrite(v2,0);
delay(200);
digitalWrite(v2,1);
delay(2000);
StringgetStr="GET/update?api_key=";
getStr+=apiKey;
getStr+="&field1=";
getStr+=String(analogRead(A0));
getStr+="\langle r \rangle n \rangle r \rangle n";
cmd+=String(getStr.length())
```