



**IOTZONE®**

# QC12通信协议

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## QC12通信协议

网络参数设置后需要重启或者重新上电。

支持TCP、UDP、MQTT

TCP 端口1234

UDP 端口 9128

MQTT接收控制指令的订阅号是sn+ctr(如:QCf3xxxxxxxx15b6ctr), 返回状态的订阅号是sn+state(如:QCf3xxxxxxxx15b6state)

### 1. 查询设备状态

发送state=?

返回

```
{  
  "cmd": "state",  
  "output": "000000000000",  
  "input": "000000000000",  
  "timer_en": 1,  
  "runtime": 26,  
  "ts": 26,  
  "sn": "QCf3xxxxxxxx15b6"  
}
```

### 2. 继电器控制

发送setr=111111111111

1表示打开继电器

0表示关闭继电器

2表示点触

x表示不动作

返回

```
{  
  "cmd": "setr",  
  "output": "111111111111",  
  "input": "000000000000",  
  "timer_en": 1,  
  "runtime": 60,  
  "ts": 60,
```



```
"sn": "QCf3xxxxxxxx15b6"
}
```

### 3. 设置继电器保存

发送relaysave=111111111111

1表示开启继电器保存

0表示关闭继电器保存

返回:

```
{
  "cmd": "outset",
  "relaystatus": "111111111111",
  "relaysave": "111111111111",
  "pulsetm1": 10,
  "pulsetm2": 10,
  "pulsetm3": 10,
  "pulsetm4": 10,
  "pulsetm5": 10,
  "pulsetm6": 10,
  "pulsetm7": 10,
  "pulsetm8": 10,
  "pulsetm9": 10,
  "pulsetm10": 10,
  "pulsetm11": 10,
  "pulsetm12": 10,
  "jgtime": 10,
  "runtime": 107,
  "ts": 107,
  "sn": "QCf3xxxxxxxx15b6"
}
```

### 4. 输入类型设置

发送intype=111111111111

1表示边沿输入

0表示电平输入

返回

```
{
  "cmd": "inset",
```



```
"intype": "11111111111",
"senceon1": "3xxxxxxxxxxx",
"senceon2": "x3xxxxxxxxxxx",
"senceon3": "xx3xxxxxxxxxxx",
"senceon4": "xxx3xxxxxxxxxxx",
"senceon5": "xxxx3xxxxxxxxxxx",
"senceon6": "xxxxx3xxxxxxxxxxx",
"senceon7": "xxxxxx3xxxxxxxxxxx",
"senceon8": "xxxxxxx3xxxxxxxxxxx",
"senceon9": "xxxxxxxx3xxxxxxxxxxx",
"senceon10": "xxxxxxxxx3xxxxxxxxxxx",
"senceon11": "xxxxxxxxxx3xxxxxxxxxxx",
"senceon12": "xxxxxxxxxxx3xxxxxxxxxxx",
"senceoff1": "3xxxxxxxxxxxxxxxx",
"senceoff2": "x3xxxxxxxxxxxxxxxx",
"senceoff3": "xx3xxxxxxxxxxxxxxxx",
"senceoff4": "xxx3xxxxxxxxxxxxxxxx",
"senceoff5": "xxxx3xxxxxxxxxxxxxxxx",
"senceoff6": "xxxxx3xxxxxxxxxxxxxxxx",
"senceoff7": "xxxxxx3xxxxxxxxxxxxxxxx",
"senceoff8": "xxxxxxx3xxxxxxxxxxxxxxxx",
"senceoff9": "xxxxxxxx3xxxxxxxxxxxxxxxx",
"senceoff10": "xxxxxxxxx3xxxxxxxxxxxxxxxx",
"senceoff11": "xxxxxxxxxx3xxxxxxxxxxxxxxxx",
"senceoff12": "xxxxxxxxxxx3xxxxxxxxxxxxxxxx",
"runtime": 1352,
"ts": 1352,
"sn": "QCf3xxxxxxxx15b6",
}
```

## 5. 查询输入参数设置

发送inset=?

返回

```
{
  "cmd": "inset",
  "intype": "11111111111",
  "senceon1": "3xxxxxxxxxxx",
```



```
"senceon2": "x3xxxxxxxxxx",
"senceon3": "xx3xxxxxxxxxx",
"senceon4": "xxx3xxxxxxxxxx",
"senceon5": "xxxx3xxxxxxxxxx",
"senceon6": "xxxxx3xxxxxxxxxx",
"senceon7": "xxxxxxx3xxxxxx",
"senceon8": "xxxxxxx3xxxx",
"senceon9": "xxxxxxx3xxx",
"senceon10": "xxxxxxx3xx",
"senceon11": "xxxxxxx3x",
"senceon12": "xxxxxxx3",
"senceoff1": "3xxxxxxxxxx",
"senceoff2": "x3xxxxxxxxxx",
"senceoff3": "xx3xxxxxxxxxx",
"senceoff4": "xxx3xxxxxxxxxx",
"senceoff5": "xxxx3xxxxxxxxxx",
"senceoff6": "xxxxx3xxxxxxxxxx",
"senceoff7": "xxxxxxx3xxxxxx",
"senceoff8": "xxxxxxx3xxxx",
"senceoff9": "xxxxxxx3xxx",
"senceoff10": "xxxxxxx3xx",
"senceoff11": "xxxxxxx3x",
"senceoff12": "xxxxxxx3",
"runtime": 1413,
"ts": 1413,
"sn": "QCf3xxxxxxxx15b6",
```

}

## 6. 查询继电器参数设置

发送 outset=?

返回

{

```
"cmd": "outset",
"relaystatus": "101010101010",
"relaysave": "111111111111",
"pulsetm1": 10,
"pulsetm2": 10,
```



```
"pulsetm3": 10,  
"pulsetm4": 10,  
"pulsetm5": 10,  
"pulsetm6": 10,  
"pulsetm7": 10,  
"pulsetm8": 10,  
"pulsetm9": 10,  
"pulsetm10": 10,  
"pulsetm11": 10,  
"pulsetm12": 10,  
"jgtime": 0,  
"runtime": 1465,  
"ts": 1465,  
"sn": "QCf3xxxxxxxx15b6"  
}
```

## 7. 设置点触时间

发送pulsetm1=100, 设置继电器1的点触时间为10秒

返回

```
{  
  "cmd": "outset",  
  "relaystatus": "101010101010",  
  "relaysave": "111111111111",  
  "pulsetm1": 100,  
  "pulsetm2": 10,  
  "pulsetm3": 10,  
  "pulsetm4": 10,  
  "pulsetm5": 10,  
  "pulsetm6": 10,  
  "pulsetm7": 10,  
  "pulsetm8": 10,  
  "pulsetm9": 10,  
  "pulsetm10": 10,  
  "pulsetm11": 10,  
  "pulsetm12": 10,  
  "jgtime": 0,  
  "runtime": 1531,
```



```
"ts": 1531,  
"sn": "QCf3xxxxxxxx15b6"  
}
```

## 8. 设置时区

发送timezone=8

返回

```
{  
  "cmd": "ntpts",  
  "ntpip": "182.92.12.11",  
  "ntpuser": "0.0.0.0",  
  "timezone": 8,  
  "utc": "0:0:0-0",  
  "ts": 1568,  
  "runtime": 1568,  
  "sn": "QCf3xxxxxxxx15b6"  
}
```

## 9. 设置上报间隔

最小间隔为30s

发送interval=100, 设置间隔时间为100秒

返回

```
{  
  "cmd": "cloud",  
  "postip": "123.57.12.252",  
  "postpt": "9128",  
  "tcpserverpt": "1234",  
  "udpserverpt": "9128",  
  "mqttserver": "180.76.114.10",  
  "mqttuser": "zmmqtt",  
  "mqttpsw": "zhenmingdianzi",  
  "mqttpport": "1883",  
  "interval": "100",  
  "runtime": 1642,  
  "ts": 1642,  
  "sn": "QCf3xxxxxxxx15b6"  
}
```



**10.重启设备**

发送restart