



**IOTZONE<sup>®</sup>**

# QS12通信协议

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## QS12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: QSCdxxxxxxxx685bctr), 返回状态的订阅号是sn+state(如: QSCdxxxxxxxx685bstate)

### 1. 查询设备状态

发送state=?

返回

```
{  
  "cmd": "state",  
  "output": "000000000000",  
  "input": "000000000000",  
  "runtime": 139,  
  "ts": 139,  
  "sn": "QSCdxxxxxxxx685b"  
}
```

### 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表示状态不变

```
{  
  "cmd": "setr",  
  "output": "111111111111",  
  "input": "000000000000",  
  "runtime": 251,  
  "ts": 251,  
  "sn": "QSCdxxxxxxxx685b"  
}
```

### 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,  
  "runtime": 299,  
  "ts": 299,  
  "sn": "QSCdxxxxxxxx685b"  
}
```

#### 4. 查询继电器参数设置

发送 outset=?

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,  
"runtime": 444,  
"ts": 444,  
"sn": "QSCdxxxxxxxxx685b"  
}
```

## 5. 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": "111111111111",  
  "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": "3xxxxxxxxxxx",  
  "senceoff2": "x3xxxxxxxxxxx",  
  "senceoff3": "xx3xxxxxxxxxxx",  
  "senceoff4": "xxx3xxxxxxxxxxx",  
  "senceoff5": "xxxx3xxxxxxxxxxx",  
  "senceoff6": "xxxxx3xxxxxxxxxxx",  
  "senceoff7": "xxxxxx3xxxxxxxxxxx",  
  "senceoff8": "xxxxxxx3xxxxxxxxxxx",  
  "senceoff9": "xxxxxxxx3xxxxxxxxxxx",  
  "senceoff10": "xxxxxxxxx3xxxxxxxxxxx",  
  "senceoff11": "xxxxxxxxxx3xxxxxxxxxxx",  
  "senceoff12": "xxxxxxxxxxx3xxxxxxxxxxx",  
}
```



```
"runtime": 769,  
"ts": 769,  
"sn": "QSCdxxxxxxxxx685b"  
}
```

## 6. 查询输入参数设置

发送inset=?

返回

```
{  
  "cmd": "inset",  
  "intype": "111111111111",  
  "senceon1": "3xxxxxxxxxxxx",  
  "senceon2": "x3xxxxxxxxxxxx",  
  "senceon3": "xx3xxxxxxxxxxxx",  
  "senceon4": "xxx3xxxxxxxxxxxx",  
  "senceon5": "xxxx3xxxxxxxxxxxx",  
  "senceon6": "xxxxx3xxxxxxxxxxxx",  
  "senceon7": "xxxxxxx3xxxxxxxx",  
  "senceon8": "xxxxxxxx3xxxxx",  
  "senceon9": "xxxxxxxxx3xxx",  
  "senceon10": "xxxxxxxxxx3xx",  
  "senceon11": "xxxxxxxxxxx3x",  
  "senceon12": "xxxxxxxxxxxx3",  
  "senceoff1": "3xxxxxxxxxxxx",  
  "senceoff2": "x3xxxxxxxxxxxx",  
  "senceoff3": "xx3xxxxxxxxxxxx",  
  "senceoff4": "xxx3xxxxxxxxxxxx",  
  "senceoff5": "xxxx3xxxxxxxxxxxx",  
  "senceoff6": "xxxxx3xxxxxxxxxxxx",  
  "senceoff7": "xxxxxxx3xxxxxxxx",  
  "senceoff8": "xxxxxxxx3xxxxx",  
  "senceoff9": "xxxxxxxxx3xxx",  
  "senceoff10": "xxxxxxxxxx3xx",  
  "senceoff11": "xxxxxxxxxxx3x",  
  "senceoff12": "xxxxxxxxxxxx3",  
  "runtime": 769,  
  "ts": 769,  
  "sn": "QSCdxxxxxxxxx685b"  
}
```



## 7. 设置网络参数

发送pulsetm1=100，设置继电器1的点触时间为10秒

返回

```
{
  "cmd": "outset",
  "relaystatus": "111111111111",
  "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,
  "runtime": 966,
  "ts": 966,
  "sn": "QSCdxxxxxxxx685b"
}
```

## 8. 设置时区

发送timezone=8

返回

```
{
  "cmd": "ntpts",
  "ntpip": "139.199.214.202",
  "ntpuser": "0.0.0.0",
  "timezone": 8,
  "utc": "0:0:0-0",
  "ts": 1000,
  "runtime": 1000,
  "sn": "QSCdxxxxxxxx685b"
}
```

## 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",  
  "mqttport": "1883",  
  "interval": "100",  
  "runtime": 1029,  
  "ts": 1029,  
  "sn": "QSCdxxxxxxxxx685b"  
}
```

## 10. 重启设备

发送restart