



# **IOTZONE<sup>®</sup>**

## **V10 Communication Protocol**

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## V10 Communication Protocol

### 1. Overview

The network relay V10 can be controlled through TCP commands and UDP commands for local area networks. For external network control, please refer to our platform.

The docking interface of the platform adopts the HTTP protocol, but the protocol commands need to refer to the commands in this document.

The TCP listening port is 1234, supporting long links and 1 link. Not familiar with TCP, it is recommended to use UDP mode.

The UDP listening port is 9128 and can support multiple links.

### 2. Communication commands

#### 1. Query device status

Send state=?

Return:

```
{
  "cmd": "state",                //command name
  "output": "0000001100",       //Relay output status
  "input": "0000001100",       // Relay input status
  "vol": [0.0, 0.0, 0.0],       //Three-phase voltage
  "cur": [0.000, 0.000, 0.000], //Three-phase current
  "power": 0,                   //aggregate capacity
  "ele": 0.00,                  //Total electricity
  "dayele": 0.00,               //Daily electricity consumption
  "freq": 0.00,                 //frequency
  "scale": 1,                   //Transformer ratio
  "timestamp": 1548122419,      //time stamp
  "sn": "va85257761293896"     //Equipment number
}
```

#### 2. Control relay output

Send setr=0xxxxxxxxx

The equal sign "=" is followed by the output states of the 10 relays. When a certain bit is 1, the corresponding output is turned on,

When a certain bit output is x, it indicates that the path is not active (whether it was previously on or on; whether it was previously off or off),

0 indicates that the path is closed (regardless of whether it was previously opened or closed, it is forcibly closed).

In the above example, control relay 1 is turned on, control relay 2 is



turned off, and other relays do not operate.

Return:

```
{  
  "cmd": "setr",  
  "output": "1000001100",  
  "input": "0000001100",  
  "vol": [0.0, 0.0, 0.0],  
  "cur": [0.000, 0.000, 0.000],  
  "power": 0,  
  "ele": 0.00,  
  "dayele": 0.00,  
  "freq": 0.00,  
  "scale": 1, "timestamp": 1548122619,  
  "sn": "va85257761293896"  
}
```