MinerVa

1 API User Guide

1.1 API Request Description

The MinerVa firmware API uses the HTTPS protocol, JSON data format, and UTF8 encoding. The request requires the access token to be placed in the Authorization of the Header. Since the firmware uses a self-signed certificate, the request needs to be made with the insecure parameter.

- GET Request Example:

```
 $ curl -X GET 'https://192.168.1.100/api/v1/systemInfo/network' –insecure
<Please change the IP address to the miner's IP>
 -H 'Authorization:Bearer <Please change it to corresponding access token>'
```

- POST Request Example:

```
 $ curl -X POST 'https://192.168.1.100/api/v1/systemInfo/setNetwork'
 --insecure
 -H 'Authorization:Bearer < Please change it to corresponding access
token >'
 -H 'content-type:application/json; charset=utf-8'
 -d '{"dhcp4": true}'
```

1.2 API Response Description

The response body structure of most APIs consists of code, message, and data. code is the error code, message is the error message, and data is the result of the API call. By default, code is 200 and message is OK when the request is successful. data may return null or non-existent in the return of some operation type APIs.

```
{
    "code": 200,
    "message ": "OK",
    "data": {
       // The specific data content of the response
    }
}
```

Error Code Description:

Error Code	Description	Troubleshoot
200	Request successful	
401	Insufficient Permissions	1. Verify that the access token is carried correctly 2. Check if the access token is expired, if it is, you need to get the token again.
400	Request Error	Verify that the request parameters are legal

2 Firmware Interface Design

2.1 User Login

This interface is used to get access token, no need to carry access token, other subsequent interfaces need to carry access token if no special instructions.

- Request URL: https://192.168.1.100/api/v1/auth/login
- Request Method: POST
- Request Parameters: (No Parameters)
- Request Body:

Parameter Name	Type	Required field	Description
username	string	Yes	Username of the GUI
password	string	Yes	Password of the GUI

- Response Body:

Parameter Name	Type	Description
tokenType	string	access token type
id	string	User id
accessToken	string	access token content

2.2 Get working mode

- This interface is used to obtain the device operating mode.
- Request URL：https://192.168.1.100/api/v1/cgminer/workMode
- Request Method：GET
- Request Parameters：(No Parameters)
- Request Body：(No Parameters)
- Response Body：

Parameter Name	Type	Description
boardLevels	string	Board level
frequency	string	Working frequency
mask	string	A hexadecimal number, corresponding to four binary digits, each of which represents an Hash board. 1 is on, 0 is off. For example, 0xa corresponds to 1010, which means that arithmetic boards 0 and 2 are off, and 1 and 3 are on. All 0s indicate sleep mode.
mode	String	Overclocking options, 0 means normal parameters, air cooling mode has 3 levels, liquid cooling mode has 5 levels
temperature	String	Operating temperature
voltage	String	Operating voltage

2.3 Setting the working mode

- This interface is used to set the device operating mode.
- Request URL: https://192.168.1.100/api/v1/cgminer/setWorkMode
- Request Method: POST
- Request Parameters: (No Parameters)
- Request Body:

Parameter Name	Type	Required field	Description
mode	string	Yes	Overclocking options, 0 means normal parameters, air cooling mode has 3 levels, liquid cooling mode has 5 levels
mask	string	Yes	A hexadecimal number, corresponding to four binary digits, each of which represents a Hash board. 1 is on, 0 is off. For example, 0xa corresponds to 1010, which means that arithmetic boards 0 and 2 are off, and 1 and 3 are on. All 0s indicate sleep mode.

- Response Body: (No Parameters)