sonnen

Table of Contents

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1. Overview

1.1. Purpose

This document describes the Rest API.

2. API

Each request and response is HTTP 1.1 compliant.

2.1. Request URL

The request URL is describe below:

http://[DEVICE_IP]:8080/api/[PATH]

- DEVICE IP – Device IP is the VPN or Local Network IP Address of the device.
- PATH – Path is the based on the type of request

2.2. Control the Battery System

The charging/discharging power of a battery system can be controlled by setting a setpoint in watts. The HTTP PUT method is used to set the setpoint of the battery system. The coresponding value of setpoint either charge or discahrge is kept until battery receives a new charging or discharging value.

- Charging Path - api/V1/setpoint/charge/[value]
- Discharging Path - api/V1/setpoint/discharge/[value]

An example of HTTP PUT request is shown below:

curl -v -X PUT http://192.168.33.185:8080/api/v1/setpoint/charge/1000

curl -v -X PUT http://192.168.33.185:8080/api/v1/setpoint/discharge/1000

```
PUT /api/v1/setpoint/charge/1000 HTTP/1.1
User-Agent: curl/7.35.0
Host: 192.168.33.185:8080
Accept: */*

HTTP/1.1 200 OK
Content-Length: 18
Content-Type: text/html; charset=UTF-8
```

2.3. System Status

The system status can be retrived by using an HTTP GET method. The return response is in JSON format.

- Status Path - api/status

Table 2.3 system status

Name	Description
Consumption_W	House comsumption in watts
Production_W	PV Production in watts
Pac_total_W	Inverter AC Power greater than ZERO is discharging Inverter AC Power less than ZERO is charging
RSOC	Relative state of charge
USOC	User state of charge
Fac	AC frequency in hertz.
Uac	AC voltage in volts
Ubat	Battery volatge in volts
Timestamp	System time
IsSystemInstalled	System is installed or not

An example of HTTP GET request is shown below:

curl -v -X GET http://192.168.33.185:8080/api/v1/status

```
GET /api/v1/status HTTP/1.1
User-Agent: curl/7.35.0
Host: 192.168.33.185:8080
Accept: */*

 HTTP/1.1 200 OK
Content-Length: 151
Content-Type: application/json

{
        "Consumption_W": 0,
        "Fac": 0,
        "IsSystemInstalled": 1,
        "Pac_total_W": 0,
        "Production_W": 0,
        "RSOC": 0,
        "Timestamp": "2016-06-13 11:52:20",
        "USOC": 0,
        "Uac": 0,
        "Ubat": 0
}
```

3. Return Codes

Table 3 shows the return codes of a request response.

Table 3. Response return codes

Return Code	Description
0	Request successfully received
5	Invalid request path
13	Internal error
16	Invalid HTTP method