**Document description**

**Fixed parameters**

token: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX (token is generally defined as a 32-bit verification code)

Token used for testing: 6eb6f069523055a339d71e5b1f6c88cc

If token verification is required, please apply for an oss account and apply by yourself

**Open Platform Overview**

- Growatt's OpenAPI open platform provides standardized RESTful data calling services for authenticated users

- The platform interface is based on the http(s) protocol and uses the OAuth2.0 authentication mechanism.

- Using the API process:
  After token verification, please apply for an oss account and apply yourself:
  https://oss.growatt.com/index (other users worldwide such as Europe),
  https://oss-cn.growatt.com/index (for Chinese users),
  https://oss-us.growatt.com/index (North American users)
  https://oss-au.growatt.com/login(For users in Australia and New Zealand)

**Token usage process:**

1. If a user has been registered on our server monitoring platform, and the device has been successfully monitored, assign the token to the user and obtain data directly, as shown in the following figure:

2. If you have not registered a user on our monitoring platform, then you need to register the server user at the server address corresponding to the token to put the monitoring URL in the server account; then use the API and obtain data as follows:
   a. Registered users
   b. Create a power station based on registered users
   c. Add collectors according to users and power stations
   d. Obtain equipment information according to users, power station and collector information, etc.
   f. Obtain the detailed data of the device according to the device information (first obtain the device type from the 3.3 interface, and then call different

interfaces to obtain the data according to the device type)
You can also specify the token in the account management under the end user settings, as shown below:

**Flow Description**

-TOKEN validity period
Approved: Permanent (tentative)

-Reasons for invalidation of authorization
User cancel authorization

**Interface documentation**

**Address Header:**

**Test address:**

http(s)://test.growatt.com/v1/

**Official address:**

Please use the new domain name to visit
([https://server-cn.growatt.com->https://openapi-cn.growatt.com](https://server-cn.growatt.com->https://openapi-cn.growatt.com)) (Chinese server)
([https://server.growatt.com->https://openapi.growatt.com](https://server.growatt.com->https://openapi.growatt.com)) (foreign server)
([https://server-us.growatt.com->https://openapi-us.growatt.com](https://server-us.growatt.com->https://openapi-us.growatt.com)) (North American server)
[http://ess-server.atesspower.com](http://ess-server.atesspower.com)  （Era can create）
[http://openapi-au.growatt.com](http://openapi-au.growatt.com) (for users in Australia and New Zealand)

**Overall note:**

- interface supports http, see interface definition

- Using GET/POST, see the interface definition, parameter UTF-8 encoding, URLEncode processing

- Data are encoded using UTF-8

- Support for returning to JSON format

- Return data structure as data: body content, error_code: error code, error_msg: error content

- When calling the interface, you need to add token in the HTTP header: the TOKEN obtained by applying to Growatt

- Time format

- Date format: YYYY-MM-DD, example: 2015-04-08

- Time format: YYYY-MM-DD HH:mm:ss, example: 2015-04-03 00:01:00

- 示例图：

**Global error code**

| Error Code | Error Interpretation |
|---|---|
| 0 | Normal (General) |
| 10011 | No privilege access (generic) |
| 10012 | Access Frequency Limitation of 5 Minutes/Time (Universal) |
| 10013 | The number per page cannot be greater than 100 (general) |
| 10014 | The number of pages cannot be greater than 250 pages (general) |
| -1 | Please use the new domain name to access ([https://server-cn.growatt.com->https://openapi-cn.growatt.com](https://server-cn.growatt.com)) ([https://server.growatt.com->https](https://server.growatt.com): //openapi.growatt.com)([https://server-us.growatt.com->https://openapi-us.growatt.com](https://server-us.growatt.com)) |

| Error Code | Error Interpretation |
|---|---|
| 0 | Normal (General) |
| 10011 | No privilege access (generic) |
| 10012 | Access Frequency Limitation of 5 Minutes/Time (Universal) |

| Error Code | Error Interpretation |
|---|---|
| 10013 | The number per page cannot be greater than 100 (general) |
| 10014 | The number of pages cannot be greater than 250 pages (general) |
| -1 | Please use the new domain name to access ([https://server-cn.growatt.com->https://openapi-cn.growatt.com](https://server-cn.growatt.com->https://openapi-cn.growatt.com)) ([https://server.growatt.com->https](https://server.growatt.com->https): //openapi.growatt.com)([https://server-us.growatt.com->https://openapi-us.growatt.com](https://server-us.growatt.com->https://openapi-us.growatt.com)) |

**Global error code**

## 1.2 Modify user information

**A brief description:**

- Interface to modify user information

**Request URL:**

- http(s)://test.growatt.com/v1/user/modify

**Request method:**

- post

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| c_user_id | Yes | string | User ID |
| mobile | Yes | int | Mobile number |
| agentCode | No | string | Installer code |

**Back to example**

{

    "data": "",

    "error_code": 0,

```
  "error_msg": ""

}
```

**Return parameter description**

| Parameter Name | Type | Description |
|---|---|---|
| error_code | int | 0: Normal return, 10001: System error, 10002: User name ID is empty, 10003: User does not exist, 10004: User ID does not match token, 10014 : Installer coding error |
| error_msg | string | Error message prompt |

**Remarks**


## 1.3 Verify that the username is duplicated

**A brief description:**

- Verify that the username is duplicated

**Request URL:**

- http(s)://test.growatt.com/v1/user/check_user

**Request method:**

- post

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| user_name | Yes | string | username |

**Back to example**

```
{

  "data": "",

  "error_code": 0,

  "error_msg": ""

}
```

| Parameter Name | Type | Description |
|---|---|---|
| error_code | int | 0: Normal return, 10001: Server exception, 10002: Username is empty, 10003: Username already exists |
| error_msg | string | Error message prompt |

**Remarks**

- Get the frequency once every 5 minutes

**1.4 Get a list of end users under the merchant**

**A brief description:**

- Get the interface of the end user list under the merchant

**Request URL:**

- http(s)://test.growatt.com/v1/user/c_user_list

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| page | No | int | page number,default 1 |
| perpage | No | int | Number of pages per page, default 20, max 100 |

**Back to example**

```
{
  "data": {
    "count": 2,
    "c_user": [
      {
```

            "c_user_id": 1,

            "c_user_name": "admin",

            "c_user_email": "imluobao@163.com",

            "c_user_tel": "",

            "c_user_regtime": "2018-02-04 09:46:50"

        }

      ]

    },

    "error_code": 0,

    "error_msg": ""

}

**Return parameter description**

| Parameter Name | Type | Description |
| --- | --- | --- |
| c_user_id | int | End User ID |
| c_user_name | string | End User Name |
| c_user_email | string | End User Registration Email |
| c_user_regtime | string | end user registration date |
| c_user_tel | int | End User Phone |
| count | int | Total number of end users |
| error_code | int | 0: Normal return, 10001: System error |
| error_msg | string | Error message prompt |

**Remarks**

**2.1 Add power station**

**A brief description:**

- Add the interface of the power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/add

**Request method:**

- post

**Parameters:**

| Parameter name | Is it required | Type | Description |
|---|---|---|---|
| c_user_id | Yes | int | User ID to which the power station be |
| name | Yes | string | power station name |
| peak_power | Yes | float | peak power (kWp) |
| latitude_f | No | string | Area country list |
| latitude_d | No | string | Installer code |
| currency | No | boolean | currency unit |
| longitude | No | boolean | longitude |
| latitude | No | boolean | latitude |
| timezone_id | No | int | The time zone code of the data displa |
| plant_type | No | int | Power station type: 0: household pow industrial and commercial power stat alleviation power station |
| createDate | No | string | Created time |
| formulaMoney | No | float | Electricity price |
| city | No | string | city |

| Parameter name | Is it required | Type | Description |
|---|---|---|---|
| plantAddress | No | string | City |

**Call example**

| Parameter name | Is it required | Value | Description |
|---|---|---|---|
| c_user_id | Yes | 74 | User ID to which the power station be |
| name | is | bole66 | power station name |
| peak_power | Yes | 20 | Peak power (kWp) |
| latitude_f | No | Thailand | Region Country List |
| latitude_d | no | AFLF6 | Installer code |
| currency | No | $ | Currency unit |
| longitude | no | 30 | longitude |
| latitude | no | 22 | latitude |
| timezone_id | No | 8 | Time zone code for data display |
| plant_type | No | 1 | Power station type: 0: Household pow Industrial and commercial power stat alleviation power station |
| createDate | No | 2022-10-13 | Creation time |
| formulaMoney | No | 1.4 | Electricity Price |
| city | no | bankok | city |
| plantAddress | No | bankok | City |

{

"c_user_id": "74",

```
"name": "bole66",

"peak_power": "20",

"latitude_f": "Thailand",

"latitude_d": "AFLF6",

"currency": "$",

"longitude": "30",

"latitude": "22",

"timezone_id": "8",

"plant_type": "1",

"createDate": "2022-10-13",

"formulaMoney": "1",

"city": "bankok",

"plantAddress": "bankok",


}
```

**Return to Example**

```
{
    "data": {
        "plant_id": 24832
    },
    "error_code": 0,
    "error_msg": ""
}
```

**Return parameter description**

| Parameter name | Type | Description |
| --- | --- | --- |
| plant_id | int | Plant ID |

| Parameter name | Type | Description |
|---|---|---|
| error_code | int | error code |
| error_msg | string | Error message pr |
| **plant_id** | **error_code** | **error_msg** |
| 77 | 0 | Return normally |

{

"error_msg": "",

"data": {

"plant_id": 77

},

"error_code": 0

}

| error_code | error_msg |
|---|---|
| 10001 | System error |

{

"error_msg": "error_system error",

"data": "",

"error_code": 10001

}

| error_code | error_msg |
|---|---|
| 10002 | Username ID is empty |

{

"error_msg": "error_User ID is empty",

"data": "",

"error_code": 10002

}

| error_code | error_msg |
|---|---|
| 10003 | The power station name is empty |

```
{
"error_msg": "error_Plant name is empty",
"data": "",
"error_code": 10003
}
```

| error_code | error_msg |
|---|---|
| 10004 | Peak power is empty |

```
{
"error_msg": "error_Peak power is empty",
"data": "",
"error_code": 10004
}
```

| error_code | error_msg |
|---|---|
| 10005 | User does not exist |

```
{
"error_msg": "error_User does not exist",
"data": "",
"error_code": 10005
}
```

| error_code | error_msg |
|---|---|
| 10006 | The power station name already exists under this user |

```
{
"error_msg": "error_Plant name already exists under this user",
"data": "",
"error_code": 10006
}
```

**Remark**

- The acquisition frequency is once every 5 minutes

**2.2 Modifying the power station**

**A brief description:**

- Modify the interface of the power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/modify

**Request method:**

- post

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| c_user_id | Yes | int | User id to which the plant belongs |
| plant_id | Yes | int | Power Station ID |
| name | Yes | string | power station name |
| latitude_f | No | string | Area country list |
| latitude_d | No | string | Installer Code |

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| peak_power | No | boolean | peak power (kWp) |
| currency | No | boolean | currency unit |
| longitude | No | boolean | Longitude |
| latitude | No | boolean | latitude |
| timezone_id | No | int | Time zone code for data display: East t... West time zone: -1~-12 |
| plant_type | No | int | Power station type: 0: household powe... industrial and commercial power stati... alleviation power station |

**Call example**

| Parameter name | Is it required | Value | Description |
|---|---|---|---|
| c_user_id | Yes | 74 | User ID to which the power station belo... |
| plant_id | Yes | 77 | Plant ID |
| name | Yes | 20 | Power station name |
| latitude_f | No | Thailand | Region Country List |
| latitude_d | no | AFLF6 | Installer code |
| peak_power | No | 20 | Peak power (kWp) |
| currency | No | $ | Currency unit |
| longitude | no | 30 | longitude |

| Parameter name | Is it required | Value | Description |
|---|---|---|---|
| latitude | no | 23 | latitude |
| timezone_id | No | 8 | Time zone code displayed by data: Eas... West time zone: -1~-12 |
| plant_type | No | 0 | Power station type: 0: Household powe... Industrial and commercial power stati... alleviation power station |

```
{

"c_user_id": "74",

"plant_id": "77",

"name": "bole66",

"latitude_f": "Thailand",

"latitude_d": "AFLF6",

"peak_power": "20",

"currency": "$",

"longitude": "30",

"latitude": "23",

"timezone_id": "8",

"plant_type": "0"

}
```

**Return to Example**

```
{

   "data": "",

   "error_code": 0,

   "error_msg": ""

}
```

**Return parameter description**

| Parameter name | Type | Description |
|---|---|---|
| error_code | int | error code |
| error_msg | string | Error message pro |

| error_code | error_msg |
|---|---|
| 0 | Return normally |

```
{
    "data": "",
    "error_code": 0,
    "error_msg": ""
}
```

| error_code | error_msg |
|---|---|
| 10001 | System error |

```
{
"error_msg": "error_System error",
"data": "",
"error_code": 10001
}
```

| error_code | error_msg |
|---|---|
| 10002 | Username ID is empty |

```
{
"error_msg": "error_User ID is empty",
"data": "",
"error_code": 10002
}
```

| error_code | error_msg |
|---|---|
| 10003 | The power station name is empty |

```
{
"error_msg": "error_Plant name is empty",
"data": "",
"error_code": 10003
}
```

| error_code | error_msg |
|---|---|
| 10004 | Peak power is empty |

```
{
"error_msg": "error_Peak power is empty",
"data": "",
"error_code": 10004
}
```

| error_code | error_msg |
|---|---|
| 10005 | User does not exist |

```
{
"error_msg": "error_User does not exist",
"data": "",
"error_code": 10005
}
```

| error_code | error_msg |
|---|---|
| 10006 | The power station name already exists |

```
{
"error_msg": "error_Plant name already",
```

"data": "",

"error_code": 10006

}

| error_code | error_msg |
|---|---|
| 10007 | The power station does not exist |

{

"error_msg": "error_Plant does not exist",

"data": "",

"error_code": 10007

}

**Remark**

- This interface is only allowed to be called 10 times a day

**2.3 Delete power station**

**A brief description:**

- Delete the interface of the power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/delete

**Call example**

| Parameter name | Is it required | Value | Descripti |
|---|---|---|---|
| plant_id | Yes | 77 | Plant ID |

{

"plant_id": "77",


}

**Return to Example**

{

```
    "data": "",

    "error_code": 0,

    "error_msg": ""
}
```

**Return parameter description**

| Parameter name | Type | Description |
|---|---|---|
| error_code | int | error code |
| error_msg | string | Error message prom |

| error_code | error_msg |
|---|---|
| 0 | Return normally |

```
{

    "data": "",

    "error_code": 0,

    "error_msg": ""
}
```

| error_code | error_msg |
|---|---|
| 10001 | System error |

```
{
"error_msg": "error_system error",

"data": "",

"error_code": 10001
}
```

| error_code | error_msg |
|---|---|
| 10002 | The power plant ID is empty |

```
{

"error_msg": "error_plant ID is empty",

"data": "",

"error_code": 10002

}
```

| error_code | error_msg |
|---|---|
| 10004 | The power station does not exist |

```
{

"error_msg": "error_plant does not exist",

"data": "",

"error_code": 10004

}
```

**Remark**

**2.4 Get a list of power plants for a user**

**A brief description:**

- Get the interface of a user's power station list

**Request URL:**

- http(s)://test.growatt.com/v1/plant/user_plant_list

**Request method:**

- post

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| user_name | Yes | string | User Account |
| page | No | int | page number,default 1 |

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| perpage | No | int | Number of pages per pa... max 100 |

**Call example**

| Parameter name | Is it required | Value | Description |
|---|---|---|---|
| user_name | is | 1236985 | user account |
| page | No | 1 | Page number, default... |
| perpage | No | 20 | Number per page, de... maximum 100 |

{

"user_name": "1236985",

"page": "1",

"perpage": "20"

``

}

**Return to Example**

{

  "data": {

    "count": 1,

    "plants": [

      {

        "status": 4,

        "locale": "en-US",

        "total_energy": 15.699999809265137,

        "operator": "API interface testing manufacturer",

        "country": "China",

            "city": "Shenzhen",

            "current_power": "",

            "create_date": "2018-12-12",

            "image_url": "2.png",

            "plant_id": 24765,

            "name": "API interface test power station",

            "installer": "API interface testing manufacturer",

            "user_id": 33,

            "longitude": "113.9",

            "latitude": "22.6",

            "peak_power": 20,

            "latitude_d": null,

            "latitude_f": null

        },

    ]

  },

  "error_code": 0,

  "error_msg": ""

}

**Return parameter description**

| Parameter name | Type | Description |
| --- | --- | --- |
| plant_id | int | Plant ID |
| name | string | Power station name |
| user_id | int | User ID to which the pow belongs |
| country | string | country name |

| Parameter name | Type | Description |
|---|---|---|
| longitude | string | longitude |
| latitude | string | latitude |
| peak_power | string | Peak power (kWp) |
| create_date | string | Website creation date |
| installer | string | Installer name |
| current_power | string | Current power (kW) |
| total_energy | string | Cumulative power genera |
| count | int | Total number of power st |
| error_code | int | error code |
| error_msg | string | Error message prompt |

| error_code | error_msg |
|---|---|
| 0 | Return normally |

```
{
    "data": {
        "count": 1,
        "plants": [
            {
                "status": 4,
                "locale": "en-US",
                "total_energy": 15.699999809265137,
                "operator": "API Interface Test Vendor",
                "country": "China",
```

```
            "city": "Shenzhen",

            "current_power": "",

            "create_date": "2018-12-12",

            "image_url": "2.png",

            "plant_id": 24765,

            "name": "API interface test station",

            "installer": "API Interface Test Vendor",

            "user_id": 33,

            "longitude": "113.9",

            "latitude": "22.6",

            "peak_power": 20,

            "latitude_d": null,

            "latitude_f": null

        },

    ]

},

"error_code": 0,

"error_msg": ""

}
```

| error_code | error_msg |
| --- | --- |
| 10001 | System error |

```
{

"data": "",

"error_code": 10001,

"error_msg": "error_system error"

}
```

**Remark**

- The acquisition frequency is once every 5 minutes

- This interface is only allowed to be called 10 times a day

**2.5 Get a list of all user power stations**

**A brief description:**

- Get the interface to all user power station lists

**Request URL:**

- http(s)://test.growatt.com/v1/plant/list

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| page | No | int | page number,default 1 |
| perpage | No | int | Number of pages per p max 100 |
| search_type | No | string | search type |
| search_keyword | No | string | search keywords |

**Call example**

| Parameter name | Is it required | Value | Description |
|---|---|---|---|
| page | No | 1 | Page number, default |
| perpage | No | 100 | Number per page, de maximum 100 |
| search_type | No | | Search type |
| search_keyword | No | test | Search keyword |

{

"page": "1",

"perpage": "100",

"search_type": "",

"search_keyword": "test"

}

**Return to Example**

{

    "data": {

        "count": 1,

        "plants": [

            {

                "status": 1,

                "locale": "en-US",

                "total_energy": 0,

                "operator": "0",

                "country": "China",

                "city": "0",

                "current_power": "",

                "create_date": "2016-09-15",

                "image_url": null,

                "plant_id": 1185,

                "name": "9",

                "installer": "0",

                "user_id": 31,

                "longitude": "",

                "latitude": "",

                "peak_power": 0,

                "latitude_d": null,

                "latitude_f": null

```
        }
  ]
    },
    "error_code": 0,
    "error_msg": ""
}
```

**Return parameter description**

| Parameter name | Type | Description |
| --- | --- | --- |
| plant_id | int | Plant ID |
| name | string | Power station name |
| user_id | int | User ID to which the pow belongs |
| country | string | country name |
| longitude | string | longitude |
| latitude | string | latitude |
| peak_power | string | Peak power (kWp) |
| create_date | string | Website creation date |
| installer | string | Installer name |
| current_power | string | Current power (W) |
| total_energy | string | Cumulative power genera |
| count | int | Total number of power st |
| latitude_d | string | Agent name |

| Parameter name | Type | Description |
| --- | --- | --- |
| latitude_f | string | Agency area |
| error_code | int | error code |
| error_msg | string | Error message prompt |

| error_code | error_msg |
| --- | --- |
| 0 | Return normally |

{

  "data": {

    "count": 1,

    "plants": [

     {

       "status": 1,

       "locale": "en-US",

       "total_energy": 0,

       "operator": "0",

       "country": "China",

       "city": "0",

       "current_power": "",

       "create_date": "2016-09-15",

       "image_url": null,

       "plant_id": 1185,

       "name": "9",

       "installer": "0",

       "user_id": 31,

       "longitude": "",

       "latitude": "",

```
            "peak_power": 0,

            "latitude_d": null,

            "latitude_f": null

        }

]

    },

    "error_code": 0,

    "error_msg": ""

}
```

| error_code | error_msg |
|---|---|
| 10001 | System error |

```
{

    "data": "",

    "error_code": 10001,

    "error_msg": "error_system error"

}
```

**Remark**

- The acquisition frequency is once every 5 minutes

- This interface is only allowed to be called 10 times a day

**2.6 Get basic information about a power station**

**A brief description:**

- Interface to obtain basic information about a power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/details

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Descrip |
|---|---|---|---|
| plant_id | Yes | int | Power S |

**Back to example**

```
{
    "data": {
        "address1": "",
        "jurisdictionorganization": "",
        "address2": "",
        "installed_dc_capacity": "",
        "city": "Shenzhen",
        "timezone": "GMT+8",
        "designerorganization": "",
        "installercontact": "",
        "create_date": "2018-12-12",
        "image_url": "2.png",
        "description": "",
        "longitude": "113.9",
        "fixed_azimuth": "",
        "offtakercontact": "",
        "status": "",
        "postal": "",
        "weathersensor_num": "",
        "weathersensor_man": "",
        "operatorcontact": "",
        "country": "China",
        "plant_type": "",
        "fixed_tilt": "",
```

```
"inverters": [

  {

    "inverter_md": "",

    "inverter_num": 1,

    "inverter_man": "Growatt"

  }

],

"installerorganization": "",

"jurisdictioncontact": "",

"installed_ac_capacity": "",

"latitude": "22.6",

"financiercontact": "",

"ownerorganization": "rmb",

"locale": "en_US",

"designercontact": "",

"state": "",

"weather_type": "",

"currency": "rmb",

"installed_panel_area": "",

"name": "API interface test power station",

"user_id": 33,

"grid_type": "",

"operatororganization": "",

"elevation": "",

"irradiationsensor_type": "",

"ownercontact": "rmb",

"weathersensor_md": "",

"tracker_type": "",
```

```
        "offtakerorganization": "",

        "dataloggers": [

          {

            "datalogger_num": 1,

            "datalogger_man": "Growatt",

            "datalogger_md": ""

          }

        ],

        "financierorganization": "",

        "peak_power": 20,

        "notes": "",

        "arrays": [

          {

            "num_modules": 0,

            "module_md": "",

            "module_man": "Growatt"

          }

        ]

      },

    "error_code": 0,

    "error_msg": ""

}
```

**Return parameter description**

| Parameter Name | Type | Description |
|---|---|---|
| name | string | power station name |
| user_id | int | User ID to which the plant belongs |

| Parameter Name | Type | Description |
|---|---|---|
| country | string | country name |
| longitude | string | Longitude |
| latitude | string | Latitude |
| create_date | string | Building date |
| image_url | string | Picture url |
| peak_power | string | peak power (kWp) |
| currency | string | currency unit |
| timezone | string | Time Zone |
| plant_type | int | Plant type(0-Residential Plant,1-Commercial Plan Mounted Plants) |
| address1 | string | Plant address |
| error_code | int | 0: Normal return, 10001: System error,    10002: P does not exist, 10003: Power station ID is empty, not exist |
| error_msg | string | Error message prompt |

**Remarks**

- Get the frequency once every 5 minute

**2.7 Get an overview of a plant data**

**A brief description:**

- Interface to get an overview of a plant data

**Request URL:**

- http(s)://test.growatt.com/v1/plant/data

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Descrip |
|---|---|---|---|
| plant_id | Yes | int | Power S |

**Back to example**

```json
{
  "data": {
    "peak_power_actual": 20,
    "monthly_energy": "15.7",
    "last_update_time": "2018-12-13 11:06:34",
    "current_power": 0,
    "timezone": "GMT+8",
    "yearly_energy": "15.7",
    "today_energy": "0",
    "carbon_offset": "9.4",
    "efficiency": "",
    "total_energy": "15.7"
  },
  "error_code": 0,
  "error_msg": ""
}
```

**Return parameter description**

| Parameter Name | Type | Description |
|---|---|---|
| peak_power_actual | string | Actual Peak Power (kW) |
| last_update_time | string | Last received data |

| Parameter Name | Type | Description |
|---|---|---|
| current_power | string | current power (kW) |
| today_energy | string | Power Generation (kWh) |
| monthly_energy | string | Power Generation in the Month (kWh) |
| yearly_energy | string | Power generation in the current year (kWh |
| total_energy | string | Cumulative power generation (kWh) |
| carbon_offset | int | Equivalent reduction of CO2 emissions |
| timezone | string | Time Zone |
| error_code | string | 0: Normal return, 10001: System error, 10 station does not exist, 10003: Power static |
| error_msg | string | Error Message Prompt |

**Remarks**

- Get the frequency once every 5 minutes

**2.8Historical power generation of the power statio**

**A brief description:**

- Obtain an interface for historical power generation of a power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/energy

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| plant_id | Yes | int | Power Station ID |

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| start_date | Yes | string | Start Date |
| end_date | Yes | string | End Date(date interva 7 days) |
| time_unit | Yes | string | time type:"day" or "m |
| page | No | int | page number,default |
| perpage | No | int | Number of pages per max 100 |

**Back to example**

{

  "data": {

    "count": 6,

    "time_unit": "day",

    "energys": [

     {

      "date": "2018-12-12",

      "energy": "0"

     },

     {

      "date": "2018-12-13",

      "energy": "7.6"

     },

     {

      "date": "2018-12-14",

      "energy": "0"

     },

```
        {
            "date": "2018-12-15",
            "energy": "0"
        },
        {
            "date": "2018-12-16",
            "energy": "0"
        },
        {
            "date": "2018-12-17",
            "energy": "0"
        }
    ]
  },
  "error_code": 0,
  "error_msg": ""
}
```

**Return parameter description**

| Parameter Name | Type | Description |
|---|---|---|
| count | int | Total Records |
| time_unit | string | time_unit on request |
| date | string | date |
| energy | string | Power Generation (kWh) |
| error_code | int | 0: Normal return, 10001: System error, 10002: Pow not exist, 10003: Power station ID is empty, 10004 incorrect |

| Parameter Name | Type | Description |
| --- | --- | --- |
| error_msg | string | Error Message Prompt |

**Remarks**

- Get the frequency once every 5 minutes

- This interface is only allowed to call 10 times a day

**2.9 Obtain power data of a certain power station**

**A brief description:**

- Obtain an interface for power data of a certain power station

**Request URL:**

- http(s)://test.growatt.com/v1/plant/power

**Request method:**

- get

**Parameters:**

| Parameter Name | Whether Required | Type | Descrip |
| --- | --- | --- | --- |
| plant_id | yes | int | Power S |
| date | yes | string | date |

**Back to example**

```
{
  "data": {
    "powers": [
      {
        "time": "2018-12-13 10:45",
        "power": 7903.39990234375
      },
      {
        "time": "2018-12-13 10:40",
```

```
        "power": 7689.7001953125

      }

    ],

    "count": 2

  },

  "error_code": 0,

  "error_msg": ""

}
```

**Return parameter description**

| Parameter Name | Type | Description |
|---|---|---|
| count | int | Total Records |
| time | string | Time |
| power | string | Power (W) |
| error_code | int | 0: Normal return, 10001: System error, 10002: Po... not exist, 10003: Power station ID is empty or tim... incorrect |
| error_msg | string | Error Message Prompt |

**Remarks**

- Get the frequency once every 5 minutes

**2.10 Get the plant information of a device**

**A brief description:**

- Obtain an interface for the plant information of a device

**Request URL:**

- http(s)://test.growatt.com/v1/plant/sn_plant

**Request method:**

- post

**Parameters:**

| Parameter Name | Whether Required | Type | Description |
|---|---|---|---|
| device_sn | Yes | string | Device serial number (serial number) |

**Back to example**

```
{
    "data": {
        "plant": {
            "status": 4,
            "locale": "",
            "total_energy": 15.699999809265137,
            "operator": "API interface test vendor",
            "country": "China",
            "city": "Shenzhen",
            "current_power": "",
            "create_date": "2018-12-12",
            "image_url": "2.png",
            "plant_id": 24765,
            "name": "API interface test power station",
            "longitude": "113.9",
            "user_id": 33,
            "installer": "API interface test vendor",
            "latitude": "22.6",
            "peak_power": 20,
            "latitude_d": null,
            "latitude_f": null
        }
```

```
    },

    "error_code": 0,

    "error_msg": ""

}
```

**Return parameter description**

| Parameter Name | Type | Description |
| --- | --- | --- |
| plant_id | int | Power Station ID |
| name | string | Power Station Name |
| user_id | int | User ID to which the plant belongs |
| country | string | country name |
| longitude | string | Longitude |
| latitude | string | Latitude |
| peak_power | string | peak power (kWp) |
| create_date | string | Building Date |
| installer | string | installer name |
| total_energy | string | Cumulative power generation (kWh) |
| count | int | Total power stations |
| latitude_d | string | Agent Name |
| latitude_f | string | Agent Area |
| error_code | int | 0: Normal return, 10001: System error, 10002: Accou exist, 10003: Device serial number is empty, 10004: empty, 10005: Device does not exist |

| Parameter Name | Type | Description |
|---|---|---|
| error_msg | string | Error Message Prompt |

**Remarks**

- Get the frequency once every 5 minutes