

Glowmarkt API documentation

Individual user

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This document explains how to use the Glowmarkt platform APIs for an individual user (someone managing a single set of data).

Important Note:

Please note, that these are deprecated instructions for customers using Bright. If you are a Bright customer please refer to this page instead:

<https://docs.glowmarkt.com/GlowmarktAPIDataRetrievalDocumentationIndividualUserForBright.pdf>

Prerequisites

To retrieve data from the API you need to do the following:

1. Download the Bright App (see instructions below)
2. Create an account using Bright (sign up following the App instructions)
3. Set up your Glow hardware (connected to both the meter and the internet)
4. When 2. and 3. are complete, send a request to Hildebrand Support (email support@hildebrand.co.uk) stating that you wish to use the Glowmarkt API, include:
 - a. Username you used when you created your Bright account
 - b. The MAC ID on your Glow CAD (either the GlowStick or the IHD/CAD)
5. You will receive an email from support when we have set up your access. (Please note that in future this process will be fully automated).

Download Bright App

Android and iOS:

Search using the words Bright and Hildebrand in the appropriate app store. If you can't find the app, use the following urls:

Android: <https://play.google.com/store/apps/details?id=uk.co.hildebrand.brightionic>

iOs: <https://itunes.apple.com/us/app/bright/id1369989022?ls=1&mt=8>

Data Retrieval Procedure

There are three steps to retrieve data which are detailed in the next sections:

1. Authenticate in the Glowmarkt Platform
2. Find the identifiers of the data streams (what we call 'Resources') that you can retrieve information from
3. Get the (time series) data of a the specific data stream(s) you require

The scope of this document describes the retrieval of time series data, a list of all the available Resource APIs can be found here (<https://api.glowmarkt.com/api-docs/v0-1/resourcesys/#/>).

Step 2. Get the data streams (resources)

Your data is stored in what we call 'resources'. Typically a resource represents a single data stream. Each resource has a unique identifier within the Glowmarkt platform (resourceId).

To retrieve your resources, use the following query:

API req	GET https://api.glowmarkt.com/api/v0-1/resource
Authentication required	JWT token and applicationId
Headers	<ul style="list-style-type: none"> Content-Type: application/json token applicationId
Example cURL	<pre>curl -X GET -H "Content-Type: application/json" -H "token: eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ0b2t1bkhhc2giOiJlOTRlYzE2MzgyMzE0YzZjMDdlZDliZmEwZGFhZDdhZTNhOTA0NDhlYjNjZTU0MzI4YWEwOTMwNTEzZjI4ZjY2ZjAwMWNiODRiYTlYzDczMjliZmZlMDlmZjI4ZDFkZiIsImVudCI6MTUzNjEzNDkxMCwiZXhwIjozNTM2Nz5NzEwZjQ.D1lTvyfo5ap69tT6MK9jceEFNLp-xmMAz6WGohIuUR4" -H "applicationId: b576fdb0-6e43-4ea4-ac75-a0fd85b0d701" "https://api.glowmarkt.com/api/v0-1/resource"</pre>
Swagger reference	https://api.glowmarkt.com/api-docs/v0-1/resourcesys/#/Resource/resource_findAll

The response will be in JSON, and will be an array of resource documents.

```
{
  "resourceId": "54f70bcd-3743-4009-a2c4-e98cc959c030",
  "resourceTypeId": "ea02304a-2820-4ea0-8399-f1d1b430c3a0",
  "name": "electricity",
  "description": "electricity consumption",
  "dataSourceUnitInfo": {
    "shid": "111125e0t031d1dfab90df4"
  },
  "ownerId": "51ad1a43-cdaf-4f48-b48c-1577d2edd65b",
  "label": "electricity consumption",
  "dataSourceResourceTypeInfo": {
    "unit": "kWh",
    "type": "ELEC"
  },
  "dataSourceType": "EH",
  "units": {
    "readings": "kWh",
    "current": "W",
    "instant": "W"
  },
  "classifier": "electricity.consumption",
  "active": true
}
```


Query Parameter	Description
offset	All the data we store is saved in UTC (Coordinated Universal Time), regardless of the timezone it was collected in. For the API to correctly return the data for the period you request you must supply the offset in minutes between the timezone you require and UTC. As an example if you wish to request data in BST (British Summer Time, UTC+1) you should specify an offset of -60. EST (East Coast N America) would be +300.
function	The aggregating function that will be applied to the data. (use sum to get total reading per period)
period	The aggregation level in which the data is to be returned (ISO 8601). <ul style="list-style-type: none"> • PT1M (minute level, only elec) • PT30M (30 minute level) • PT1H (hour level) • P1D (day level) • P1W (week level, starting Monday) • P1M (month level) • P1Y (year level)

This is an example response:

```
{
  "status": "OK",
  "name": "electricity consumption",
  "resourceTypeId": "ea02304a-2820-4ea0-8399-f1d1b430c3a0",
  "resourceId": "73f70bcd-3743-4009-a2c4-e98cc959c030",
  "query": {
    "from": "2018-04-10T00:00:00",
    "to": "2018-04-11T23:59:59",
    "period": "P1D"
  },
  "data": [
    [
      1523318400,
      48.79
    ],
    [
      1523404800,
      48.826
    ]
  ]
}
```

All the data is under the data field. The data is an array of arrays.

```
[
  [UTC timestamp, reading],
  [UTC timestamp, reading],
]
```

Important: depending on the aggregation period, there is a limit to the volume of data that can be requested per query as follows:

Period Parameter	Description	Limit in days
PT1M	1-minute level	2 days
PT30M	30-minute level	10 days
PT1H	1-hour level	31 days
P1D	1-day level	31 days
P1W	1-week level	6 weeks
P1M	1-month level	366 days
P1Y	1-year level	366 days

Finally, be aware that when the aggregation periods of P1W and P1M are used, the start date of the query (“to” date) should be set to the beginning of the week (Monday) or month respectively (1st day).

All the data is under the data field. The data is an array of arrays. When querying for instant readings, there will be a single element in the data array, the date of which indicates the UTC time the Glow Platform received the reading. Typically, depending on the hardware the instantaneous read should get update every 6-10 seconds.

```
[  
  [UTC timestamp, reading]  
]
```