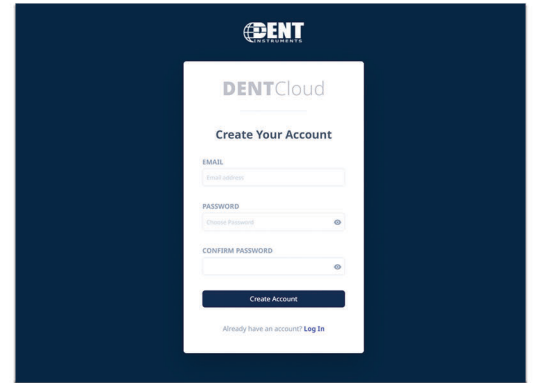


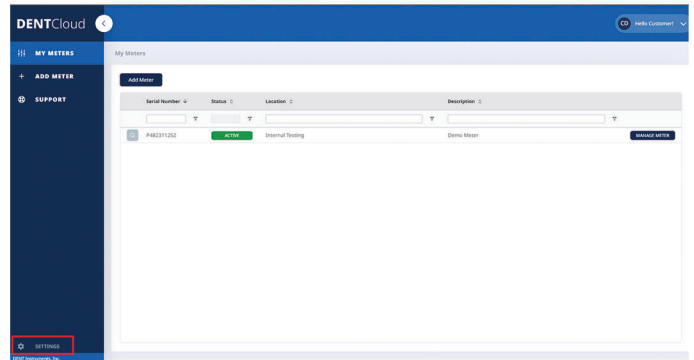
# DENTCloud™ API QUICKSTART

## EASY SETUP FOR QUICK DATA ACCESS

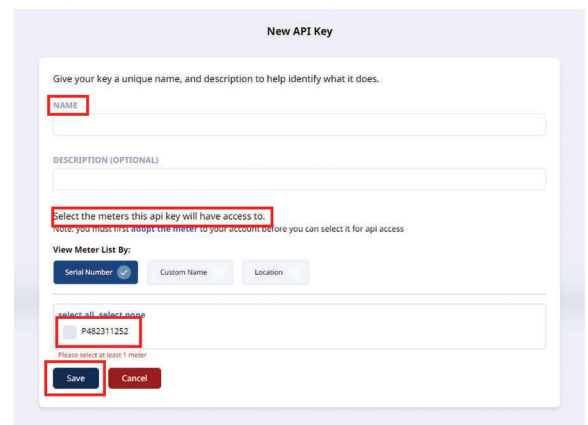
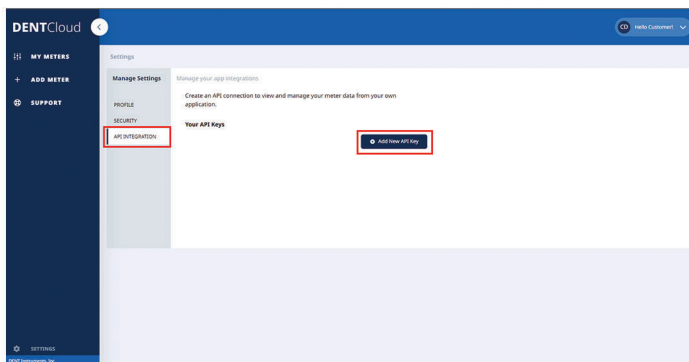
- 1 LOGIN TO YOUR CLOUD ACCOUNT**  
Go to <https://dentcloud.io> and login to your account with your previously created email address and password.



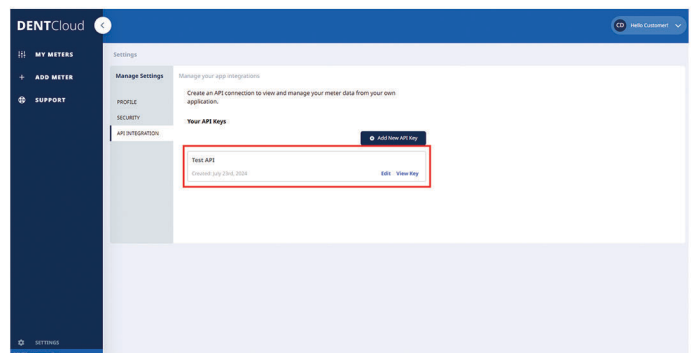
- 2 GO TO SETTINGS**  
On the bottom left corner, click on settings.



- 3 ENTER API INFORMATION**  
Click API Integration, "Add new API Key" and fill in the necessary information.



- 4 CHECK TO SEE THAT YOUR NEW API KEY HAS BEEN CREATED**  
After saving the information for the new API key check to see if it shows up in your list.



# DentCloud Meter Data API

## Overview

DentCloud Meter Data API provides detailed access to electricity meter data, enabling applications in financial analysis, resource management, and operational efficiency for utilities sectors.

## Getting Started

For beta customers, api key and key Id will be issued individually. If a key becomes compromised or other requires regeneration, create a meeting with your account manager.

### Base URL

<https://api.dentcloud.io/v1>

### Authentication

All API requests must include the following headers for authentication: - x-api-key: Your unique API key - x-key-id: Your key ID

Example of headers:

```
x-api-key: <your_api_key_here>
x-key-id: <your_key_id_here>
```

### Rate Limits

Beta usage plans have a request rate of 5/second and a burst rate (max concurrent requests) of 5.

## API Endpoints

### Retrieve Meter Data

**Endpoint:** GET /v1

**Description:** Fetches meter readings based on specified parameters.

### Query Parameters:

Parameter	Required	Description	Example
request	Yes	Type of request.	getData, getMeters, getTopics
year	Yes	Full year of the data point.	2023
month	Yes	Month of the data point (01-12).	12
day	No	Day of the data point (01-31).	15
hour	No	Hour of the data point (00-23).	13
topics	Yes	Array of topics to retrieve.	[DemandkW, kWhNet]
meter	Yes	Meter identifier.	P482311252

## Request Data

[https://api.dentcloud.io/v1?request=getData&year=2023&month=12&day=12&hour=2&topics=\[kW, A\]&meter=P482311252](https://api.dentcloud.io/v1?request=getData&year=2023&month=12&day=12&hour=2&topics=[kW, A]&meter=P482311252)

## Request Data Response Body

```
{"headers":["date","time","A/Ch/A1","A/Ch/A2","A/Ch/C1","A/Ch/E1","A/Ch/E2","DemandkW/Elm/A","DemandkW/Elm/C","DemandkW/Elm/E"],"topics":[{"date":"2023-12-12","time":"02:02","A/Ch/A1":"1.358","A/Ch/A2":"0.373","A/Ch/C1":"0.23","A/Ch/E1":"0.0","A/Ch/E2":"0.0","DemandkW/Elm/A":"0.357","DemandkW/Elm/C":"0.0","DemandkW/Elm/E":"0.0"},{"date":"2023-12-12","time":"02:17","A/Ch/A1":"1.747","A/Ch/A2":"0.374","A/Ch/C1":"0.23","A/Ch/E1":"0.0","A/Ch/E2":"0.0","DemandkW/Elm/A":"0.222","DemandkW/Elm/C":"0.0","DemandkW/Elm/E":"0.0"},{"date":"2023-12-12","time":"02:32","A/Ch/A1":"7.366","A/Ch/A2":"0.374","A/Ch/C1":"0.23","A/Ch/E1":"0.0","A/Ch/E2":"0.0","DemandkW/Elm/A":"0.639","DemandkW/Elm/C":"0.0","DemandkW/Elm/E":"0.0"},{"date":"2023-12-12","time":"02:47","A/Ch/A1":"1.373","A/Ch/A2":"2.758","A/Ch/C1":"0.23","A/Ch/E1":"0.0","A/Ch/E2":"0.0","DemandkW/Elm/A":"0.376","DemandkW/Elm/C":"0.0","DemandkW/Elm/E":"0.0"}]}
```

**Format:** The response is intended to be parsed into tables with headers, and the topics object is a sorted array of table rows.

**Return Time:** The date and time are in UTC (Epoch time)

## Request Available Meters

<https://api.dentcloud.io/v1?request=getMeters>

## Request Meters Response Body

```
{"success":true,"meters":["P482311252","P482102272","P482102270"]}
```

## Request Topics

<https://api.dentcloud.io/v1?request=getTopics>

## Request Topics Response Body

```
{"success":true,"topics":[{"unit":"kVAh","requestKey":"kVAHNet","description":"Net Kilovolt Ampere Hours."}, {"unit":"kWh","requestKey":"kWHNet","description":"Power. Net Kilowatt Hours."}, {"unit":"kW","requestKey":"DemandkW","description":"Power. Demand Kilowatts."}, {"unit":"A","requestKey":"A","description":"Current. Amperes."}, {"unit":"dPF","requestKey":"dPF","description":"Displacement Power Factor. Power usage Efficiency."}, {"unit":"V","requestKey":"V","description":"Voltage."}]}
```

## Example Code

*Node.js (using fetch)*

```
const fetch = require('node-fetch');

const url = 'https://api.dentcloud.io/v1?request=getData&year=2023&month=12&topics=[DemandkW]&meter=P482311252';
const options = {
  method: 'GET',
  headers: {
    'x-api-key': 'your_api_key_here',
    'x-key-id': 'your_key_id_here'
  }
};

fetch(url, options)
  .then(response => response.json())
  .then(response => console.log(response))
  .catch(err => console.error('error:' + err));
```

*Node.js (using axios)*

```
const axios = require('axios');

const url = 'https://api.dentcloud.io/v1';
const config = {
  headers: {
    'x-api-key': 'your_api_key_here',
    'x-key-id': 'your_key_id_here'
  },
  params: {
    request: 'getData',
    year: 2023,
    month: '12',
    topics: '[DemandkW]',
    meter: 'P482311252'
  }
};

axios.get(url, config)
  .then(response => console.log(response.data))
  .catch(error => console.error('error:', error));
```

*Python (using requests)*

```
import requests
```

```
url = 'https://api.dentcloud.io/v1'
```

```
headers = {  
    'x-api-key': 'your_api_key_here',  
    'x-key-id': 'your_key_id_here'
```

```
}
```

```
params = {
```

```
    'request': 'getData',  
    'year': '2023',  
    'month': '12',  
    'topics': '[DemandkW]',  
    'meter': 'P482311252'
```

```
}
```

```
response = requests.get(url, headers=headers, params=params)
```