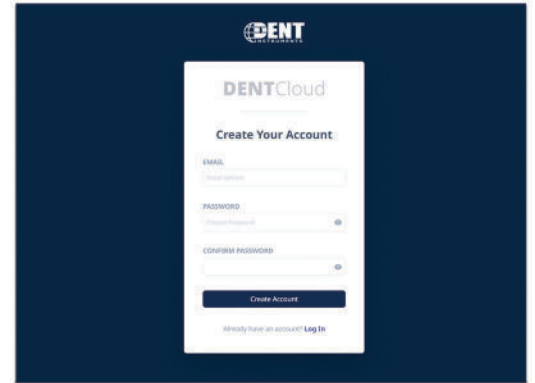


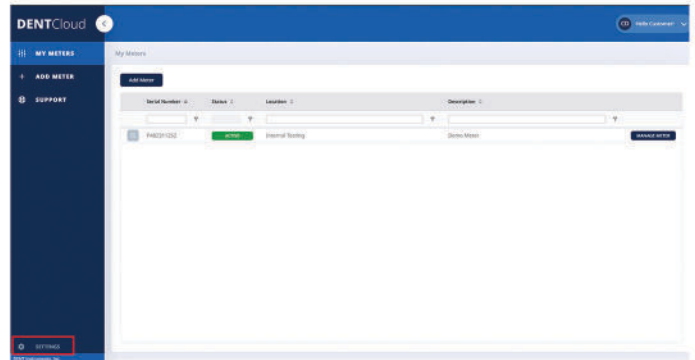
DENTCloud™ API QUICKSTART

EASY SETUP FOR QUICK DATA ACCESS

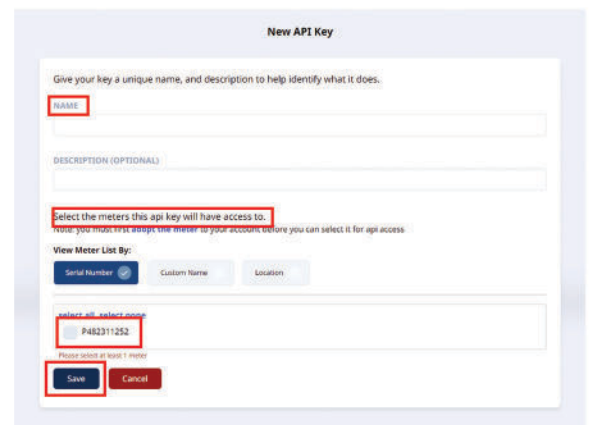
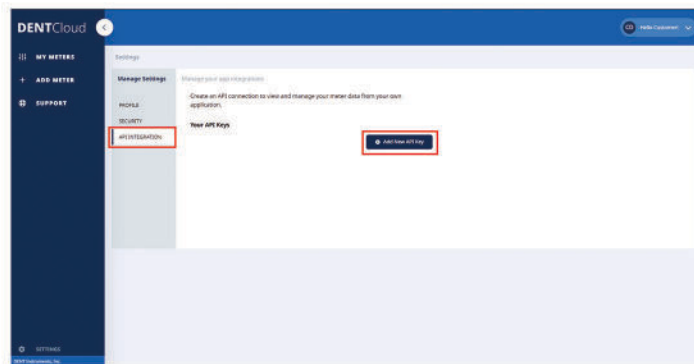
- 1 LOGIN TO YOUR CLOUD ACCOUNT**
Go to <https://dentcloud.io> and login to your account with your previously created email address and password.



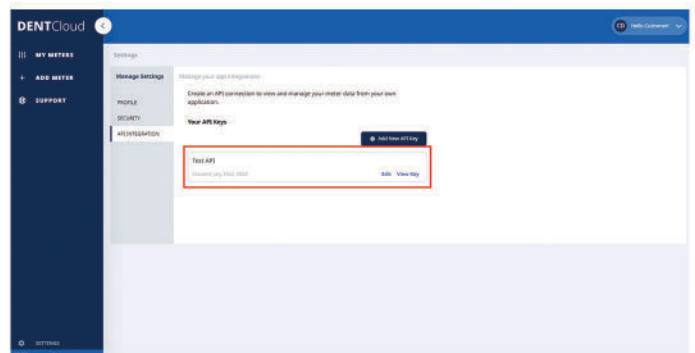
- 2 GO TO SETTINGS**
On the bottom left corner, click on settings.



- 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)
```