

# API Document

## GetACData

```
[GET]
https://aiot-task-api.azurewebsites.net/api/GetACData
```

### Features

取得冷氣溫度

### Parameter

- air\_id : 冷氣id
- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )

### Return

- temperature : 冷氣溫度

### Example

[https://aiot-task-api.azurewebsites.net/api/GetACData?air\\_id=1&time=2021/01/27 03:15:00](https://aiot-task-api.azurewebsites.net/api/GetACData?air_id=1&time=2021/01/27 03:15:00)

## SetACData

```
[POST]
https://aiot-task-api.azurewebsites.net/api/SetACData
```

### Features

設定冷氣資料

### Parameter

- factory\_id : 廠房id (需在factory table裡有)
- air\_id : 冷氣id
- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )
- temperature : 溫度

### Return

- status code

### Example

```
import requests

url = "https://aiot-task-api.azurewebsites.net/api/SetACData"

payload = "-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"factory_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"air_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"time\"\r\n\r\n2021/01/27 03:15:00\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"temperature\"\r\n\r\n25\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\n\r\n"
headers = {
    'content-type': "multipart/form-data; boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW",
    'cache-control': "no-cache",
    'postman-token': "51f673b0-2ee2-369f-6279-da084c5b83e6"
}
```

```
response = requests.request("POST", url, data=payload, headers=headers)

print(response.text)
```

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## GetENVData

```
[GET]
https://aiot-task-api.azurewebsites.net/api/GetENVData
```

```
[GET]
https://aiot-task-api.azurewebsites.net/api/GetENVData
```

### Features

取得環境溫度

### Parameter

- env\_id : AVNET編號
- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )

### Return

- temperature : 環境溫度
- humidity : 環境濕度
- co2 : 環境二氧化碳

### Example

[https://aiot-task-api.azurewebsites.net/api/GetENVData?env\\_id=1&time=2021/01/27 03:15:00](https://aiot-task-api.azurewebsites.net/api/GetENVData?env_id=1&time=2021/01/27 03:15:00)

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## SetENVData

```
[POST]
https://aiot-task-api.azurewebsites.net/api/SetENVData?code=Z1oTdKVMQqhumzBefI5UKaeLrnhIIPe5x2vtw5yfa2aUXCgeXGVCaA==
```

### Features

設定廠房內環境資料

### Parameter

- factory\_id : 廠房id (需在factory table裡有)
- env\_id : 環境id
- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )
- temperature : 溫度
- humidity : 濕度
- co2 : 二氧化碳
- [可選] machine\_num : 每個環境機台數量
- [可選] employee\_num : 每個環境員工數量

## Return

- status code

## Example

```
import requests

url = "https://aiot-task-api.azurewebsites.net/api/SetENVData"

querystring = {"code": "Z1oTdKVMQqHumzBefI5UKaeLrnHIIPe5x2vtw5yfa2aUXCgeXGVCaA="}

payload = "-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"factory_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"temperature\"\r\n\r\n25\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"humidity\"\r\n\r\n-1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"co2\"\r\n\r\n-1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"token\"\r\n\r\n5dc5e068-410e-9e87-b180-c7fad0eb5d45\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW"
headers = {
    'content-type': "multipart/form-data; boundary=----WebKitFormBoundary7MA4YWxkTrZu0gW",
    'cache-control': "no-cache",
    'postman-token': "5dc5e068-410e-9e87-b180-c7fad0eb5d45"
}

response = requests.request("POST", url, data=payload, headers=headers, params=querystring)

print(response.text)
```

## GetEXTData

```
[GET]
https://aiot-task-api.azurewebsites.net/api/GetEXTData
```

### Features

取得室外區域環境資料

### Parameter

- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )
- area : 所在區域( e.g. 新竹 )

### Return

- temperature : 環境溫度
- humidity : 環境濕度 (-1代表沒有資料)
- co2 : 環境二氧化碳 (-1代表沒有資料)

### Example

[https://aiot-task-api.azurewebsites.net/api/GetEXTData?time=2021/01/25\\_00:00:00&area=新竹](https://aiot-task-api.azurewebsites.net/api/GetEXTData?time=2021/01/25_00:00:00&area=新竹)

## SetEXTData

```
[POST]
https://aiot-task-api.azurewebsites.net/api/SetEXTData
```

### Features

設定室外區域環境資料

### Parameter

- time : 24H時間 ( yyyy/MM/dd\_HH:mm:ss )

- temperature : 溫度
- [可選] humidity : 濕度
- [可選] co2 : 二氧化碳
- area : 所在區域 ( e.g. 新竹 )

## Return

- status code

## Example

```
import requests

url = "https://aiot-task-api.azurewebsites.net/api/SetEXTData"

payload = "-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"time\"\r\n\r\n2021/1/25_01:00:00\r\n"
headers = {
    'content-type': "multipart/form-data; boundary=---WebKitFormBoundary7MA4YWxkTrZu0gW",
    'cache-control': "no-cache",
    'postman-token': "6051ee59-e89a-84d5-b971-7c41b4367be9"
}

response = requests.request("POST", url, data=payload, headers=headers)

print(response.text)
```

# GetWeights

```
[GET]
https://aiot-task-api.azurewebsites.net/api/GetWeights
```

## Features

取得環境和冷氣的權重

## Parameter

- factory\_id
- env\_id
- air\_id

## Return

- distance : 冷氣和環境的距離
- weight : 冷氣和環境的權重

## Example

[https://aiot-task-api.azurewebsites.net/api/GetWeights?factory\\_id=1&air\\_id=1&env\\_id=1](https://aiot-task-api.azurewebsites.net/api/GetWeights?factory_id=1&air_id=1&env_id=1)

# SetWeights

```
[POST]
https://aiot-task-api.azurewebsites.net/api/SetWeights
```

## Features

設定環境和冷氣的距離和權重

如果是已經存在的id組合，會自動改為"更新"

## Parameter

- factory\_id
- env\_id
- air\_id
- distance
- weight

## Return

- status code

## Example

```
import requests

url = "https://aiot-task-api.azurewebsites.net/api/SetWeights"

payload = "-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"factory_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"env_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"air_id\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"distance\"\r\n\r\n10\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\nContent-Disposition: form-data; name=\"weight\"\r\n\r\n1\r\n-----WebKitFormBoundary7MA4YWxkTrZu0gW\r\n"
headers = {
    'content-type': "multipart/form-data; boundary=---WebKitFormBoundary7MA4YWxkTrZu0gW",
    'cache-control': "no-cache",
    'postman-token': "4164e5a1-07cd-f530-a719-d6f6680801e8"
}

response = requests.request("POST", url, data=payload, headers=headers)

print(response.text)
```