

LOKII CE Open API v1.0

This is a LOKII-CE platform based on the OpenAPI 3.0 specification.

The open APIs provides all the functions to allow user to access all the LOKII-CE cloud functions together with the control of the LOII-CE boards hardware.

You can find out more about LOKII-CE at <https://lokii-sys.com/>.

You can now help us to improve the API by sending us feedback: lokii@centek.com.hk That way, with time, we can improve the API in general, and expose some of the new features in OAS3.

If you are looking for more information of LOKII-CE boards, then click [here](#).

More information: <https://www.centek.com.hk>

Contact Info: lokii@centek.com.hk

Version: 0.1

BasePath: /lokii/v1/

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Access

1. APIKey KeyParamName:api-key KeyInQuery:false KeyInHeader:true

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Command

GET /smartiot/{iot_id}/command

[Up](#)

Set Smartiot Command (`setSmartiotCommandSmartiotlotIdCommandGet`)

Path parameters

iot_id (required)
Path Parameter –

Query parameters

rgb (optional)
Query Parameter – default: 0xFFFFFF

gpio1 (optional)
Query Parameter – default: false

gpio2 (optional)
Query Parameter – default: false

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

LokiiAI

POST /trainAudio/audio.wav

[Up](#)

audio training api (`postAudioTrain`)

Post an audio for online audio training.

The input audio file must be in wav file format.

Consumes

This API call consumes the following media types via the Content-Type request header:

- audio/wav

Request body

body Object (required)

Body Parameter – The upload audio file in 16KHz 16-bit mon PCM wav file

Query parameters

index (required)

Query Parameter – The audio training sets used for audio recognition. The valid index should be 1 -5. for custom AI functions trained by user submitted data. default: 1

class (required)

Query Parameter – The audio recognized class name

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

POST /recognizeTabularData/:data

Up

data recognized api (**postDataRecognize**)

Post a csv for online data recognition.

The input file must be in csv file format seperated by comma.

Consumes

This API call consumes the following media types via the Content-Type request header:

- text/plain

Request body

body Object (required)

Body Parameter – The upload data file in csv file format

Query parameters

index (required)

Query Parameter – The tabular data training sets used for data classification. The valid index should be 1 -5. for custom AI functions trained by user submitted data. default: 1

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Recognized Response

422

Validation Error [HTTPValidationError](#)

POST /trainTabularData/data.csv

Up

data training api (**postDataTrain**)

Post a csv for online data training.

The input file must be in csv file format seperated by comma.

Consumes

This API call consumes the following media types via the Content-Type request header:

- text/plain

Request body

body **Object** (required)

Body Parameter – The upload data file in csv file format

Query parameters

index (required)

Query Parameter – The tabular data training sets used for data classification. The valid index should be 1 -5. for custom AI functions trained by user submitted data. default: 1

class (required)

Query Parameter – The recognized class name

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

POST /recognizeImage/image.jpg

image recognition api (**postImageRecognize**)

Post an image binary data for online image recognition

Consumes

This API call consumes the following media types via the Content-Type request header:

- image/jpeg

Request body

body **Object** (required)

Body Parameter – The upload image

Query parameters

index (optional)

Query Parameter – The image recognition training sets used for image recognition. The valid index should be 0 -5. The default value is 0 for built-in trained image data sets. Index 1 -5 are for custom AI functions trained by user submitted data. default: 0

Return type

String

Example data

Content-Type: application/json

```
"butterfly"
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- text/plain
- application/json

Responses

200

object text string **String**

422

Validation Error **[HTTPValidationError](#)**

POST /trainImage/image.jpg

image training api (**postImageTrain**)

Post an image for online image training.

The input image file must be in jpg file format.

Consumes

This API call consumes the following media types via the Content-Type request header:

- image/jpeg

Request body

body **Object** (required)

Body Parameter – The upload image

Query parameters

index (required)

Query Parameter – The image training sets used for image recognition. The valid index should be 1 -5. for custom AI functions trained by user submitted data. default: 1

class (required)

Query Parameter – The image recognized class name

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

POST /recognizeSpeech/sound.wav

Up

speech recognition api (**postSpeechRecognize**)

Post a wav binary data for online speech recognition.

The input wav file must be in 16KHz 16-bit mono PCM wav file

Consumes

This API call consumes the following media types via the Content-Type request header:

- audio/wav

Request body

body Object (required)

Body Parameter – The upload audio

Query parameters

index (optional)

Query Parameter – The audio training sets used for speech recognition. The valid index should be 0 -5. The default value is 0 for built-in trained audio data sets. Index 1 -5 are for custom AI functions trained by user submitted data. default: 0

Return type

String

Example data

Content-Type: application/json

```
"How are you today"
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- text/plain
- application/json

Responses

200

object text string [String](#)

422

Validation Error [HTTPValidationError](#)

Up

POST /textToSpeech/input.txt

text to speech ([postTextToSpeech](#))

Post a text file (.txt) for online text to speech function.

Since not all browser support the audio playback.

(Please run the command in desktop command line with --output [filename].)

Consumes

This API call consumes the following media types via the Content-Type request header:

- text/plain

Request body

body [Object](#) (required)

Body Parameter – The text file

Query parameters

index (optional)

Query Parameter – The audio voices index used for speech synthesis. The valid index should be 0 -5. The default value is 0 for built-in female voice. default: 0

Return type

byte[]

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- audio/mp3
- application/json

Responses

200

An audio file [byte\[\]](#)

422

Validation Error [HTTPValidationError](#)

Report

Up

GET /smartshield/report

Set Smartshield Report (`setSmartshieldReportSmartshieldReportGet`)

Query parameters

frequency (optional)
Query Parameter – default: 1

Example data

Content-Type: application/json

```
""
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

Sensor

Up

GET /smartiots/{iot_id}/accelerometer

Read 3 Axis Accelerometer (`read3AxisAccelerometerSmartiotlotIdAccelerometerGet`)

Path parameters

iot_id (required)
Path Parameter –

Query parameters

limit (optional)
Query Parameter – default: 1

Return type

array[[AccelerometerData](#)]

Example data

Content-Type: application/json

```
[ {  
  "timestamp" : 1645756275,  
  "accelerometer" : [ 0.4609375, -0.4609375, 8.58203125 ]  
}, {  
  "timestamp" : 1645756275,
```



```
"accelerometer" : [ 0.4609375, -0.4609375, 8.58203125 ]
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiot/{iot_id}/gyro

Up

Read 3 Axis Gyro (read3AxisGyroSmartiotlotIdGyroGet)

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[GyroData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "gyro" : [ -0.00390625, -0.001953125, 0 ]
}, {
  "timestamp" : 1645756275,
  "gyro" : [ -0.00390625, -0.001953125, 0 ]
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiot/{iot_id}/magnetometer

Up

Read 3 Axis Magnetometer (read3AxisMagnetometerSmartiotlotIdMagnetometerGet)

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[MagnetometerData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "magnetometer" : [ -14.9375, -24.3125, -25.6875 ]
}, {
  "timestamp" : 1645756275,
  "magnetometer" : [ -14.9375, -24.3125, -25.6875 ]
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

Up

GET /smartiot/{iot_id}/co2

Read Co2 Concentration ([readCo2ConcentrationSmartiotlotIdCo2Get](#))

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[Co2Data](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "co2" : 400
} ]
```

```
}, {
  "timestamp" : 1645756275,
  "co2" : 400
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiots/{iot_id}/light

[Up](#)

Read Light Intensity (readLightIntensitySmartiotlotIdLightGet)

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[LightData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "light" : 100
}, {
  "timestamp" : 1645756275,
  "light" : 100
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiots/{iot_id}/humidity

[Up](#)

Read Smartiot Humidity ([readSmartIOTHumiditySmartiotlotIdHumidityGet](#))

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[HumidityData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "humidity" : 82
}, {
  "timestamp" : 1645756275,
  "humidity" : 82
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiot/{iot_id}/temperature

Up

Read Smartiot Temperature ([readSmartIOTTemperatureSmartiotlotIdTemperatureGet](#))

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[TemperatureData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "temperature" : 21.5
}, {
  "timestamp" : 1645756275,
  "temperature" : 21.5
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

Up

GET /smartiots/{iot_id}/sound

Read Sound Volume ([readSoundVolumeSmartiotlotIdSoundGet](#))

Path parameters

iot_id (required)
Path Parameter –

Query parameters

limit (optional)
Query Parameter – default: 1

Return type

array[[SoundData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "sound" : 40
}, {
  "timestamp" : 1645756275,
  "sound" : 40
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiot/{iot_id}/distance

Read ToF Distance (`readToFDistanceSmartiotlotIdDistanceGet`)

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[DistanceData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "distance" : 10
}, {
  "timestamp" : 1645756275,
  "distance" : 10
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

GET /smartiot/{iot_id}/tvoc

Read Tvoc Concentration (`readTvocConcentrationSmartiotlotIdTvocGet`)

Path parameters

iot_id (required)
Path Parameter —

Query parameters

limit (optional)
Query Parameter — default: 1

Return type

array[[TvocData](#)]

Example data

Content-Type: application/json

```
[ {
  "timestamp" : 1645756275,
  "tvoc" : 100
}, {
  "timestamp" : 1645756275,
  "tvoc" : 100
} ]
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response

422

Validation Error [HTTPValidationError](#)

User

Up

GET /user

Read User Smartshield ([readUserSmartshieldUserGet](#))

Return type

[SmartShieldInfo](#)

Example data

Content-Type: application/json

```
{
  "email" : "markuz@centek.com.hk",
  "smartshield" : "smartIOT-F8DA78",
  "username" : "Markuz"
}
```

Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

Responses

200

Successful Response [SmartShieldInfo](#)

Models

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AccelerometerData - AccelerometerData

[Up](#)

timestamp

String

accelerometer

array[BigDecimal]

Co2Data - Co2Data

[Up](#)

timestamp

String

co2

BigDecimal

DistanceData - DistanceData

[Up](#)

timestamp

String

light

BigDecimal

GyroData - GyroData

[Up](#)

timestamp

String

gyro

array[BigDecimal]

HTTPValidationError - HTTPValidationError

[Up](#)

detail (optional)

array[ValidationError]

HumidityData - HumidityData

[Up](#)

timestamp

String

humidity

BigDecimal

LightData - LightData [Up](#)

timestamp
String

light
BigDecimal

MagnetometerData - MagnetometerData [Up](#)

timestamp
String

magnetometer
array[BigDecimal]

SmartShieldInfo - SmartShieldInfo [Up](#)

email
String format: email

smartshield
String

username
String

SoundData - SoundData [Up](#)

timestamp
String

light
BigDecimal

TemperatureData - TemperatureData [Up](#)

timestamp
String

temperature
BigDecimal

TvocData - TvocData [Up](#)

timestamp
String

tvoc
BigDecimal

ValidationError - ValidationError [Up](#)

loc
array[null]
items anyOf:

msg

String

type
String