

## Aeropulse API Document

### Preparation Instructions

Before using the Aeropulse API, you must first obtain your API credentials.

Please send an email to [info@aeropulse.com](mailto:info@aeropulse.com) (<mailto:info@aeropulse.com>) with the subject line:

**Aeropulse API Request – appId, appSecret and Public Key**

In your email, please include the following information:

- Company name
- Contact person 's full name
- Contact person 's email address

Once we review your request, we will provide the **appId**, **appSecret**, **public key**, and **API demo** as soon as possible.

Date	Description	Author
2026-02-07	Document Initial Version	Mi Yang
2026-03-19	Adjust Document Rules	Mi Yang

## 1. Interface Rules

1. **Request Method:** POST + JSON

2. **Headers:** Refer to the specific interface documentation for definitions.

3. **Standard format of JSON data body:** {"data":"encryptData","key":"aesEncryptKey"}, where:

**key:** The random key used for the AES algorithm (converted from a byte array to a hexadecimal string). This key must be encrypted using the RSA algorithm before being included in the message.

**data:** The business data, encrypted using the AES random key and then encoded with Base64 (see the example code below).

*For example, if the business message is: {"deviceId":2232}, the AES key is: aesKey, and the RSA public key is rsaPubKey.*

The encryption steps are as follows:

3.1. First, use aesKey to encrypt the string {"deviceId":2232}, obtaining the encrypted message encryptData.

3.2. Then, use rsaPubKey to encrypt aesKey, obtaining aesEncryptKey.

3.3. Assemble the final encrypted message: {"data":"encryptData","key":"aesEncryptKey"}

4. The code for generating the AES Key and encryption (Java) is as follows:

```
/**
 * Randomly generate a key
 *
 * @return String
 */
public static String getAesKey() {
    try {
        KeyGenerator kg = KeyGenerator.getInstance("AES");
        kg.init(128);
        //To generate how many bits, simply modify this part. 128, 192 或 256
        SecretKey sk = kg.generateKey();
        byte[] b = sk.getEncoded();
        return byteToHexString(b);
    } catch (Exception e) {
        log.error("getKey error:", e);
    }
    return null;
}

/**
 * Convert byte array to hexadecimal string
 *
 * @param bytes byte[]
 * @return String
 */
public static String byteToHexString(byte[] bytes) {
    StringBuffer sb = new StringBuffer();
    for (int i = 0; i < bytes.length; i++) {
        String strHex = Integer.toHexString(bytes[i]);
        if (strHex.length() > 3) {
            sb.append(strHex.substring(6));
        } else {
            if (strHex.length() < 2) {
                sb.append("0" + strHex);
            } else {
                sb.append(strHex);
            }
        }
    }
    return sb.toString();
}

/**
 * encryption
 *
 * @param content String
 * @param key String
 * @return String
 */
public static String aesEncrypt(String content, String key) {
    byte[] result = null;
    try {
        Cipher cipher = Cipher.getInstance(ALGORITHM);
        SecretKeySpec keySpec = new SecretKeySpec(key.getBytes(CHARSET_NAME), AES_NAME);
        AlgorithmParameterSpec paramSpec = new IvParameterSpec(IV.getBytes());
        cipher.init(Cipher.ENCRYPT_MODE, keySpec, paramSpec);
    }
}
```

## 2. Interface List

### 2.1. Get AuthToken

### 2.1.1. Request Method

Post+JSON

Interface Address: <https://www.aeropulse.cloud/server/aero-api/outer/auth>

### 2.1.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
appld	App ID	String	Yes	Contact operations team	

### 2.1.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
appSecret	App Secret	String	Y	Contact Ops	
timestamp	Timestamp	Long	Y	Timesstamp in milliseconds. Represents the request start time. Requests with time difference > 30s from server time are invalid.	

### 2.1.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
accessToken	Authorization Token	String	Y		
refreshToken	Refresh Token	String	Y		It is recommended to call refresh 10s (or more) before expiry.
expire	Expiry Time (seconds)	Number	Y	Default 6 hours	

## 2.1.5. Parameter Example

Request Parameters Before Encryption:

```
{
  "appSecret": "23829ajdfapjsldfjapdsd",
  "timestamp": 1770304331647
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIAnhlibhc1n+Ba5ksqtjQv  
aqsV8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw=", "key": "jE5+0k8Tss0WA80wfzOIAF5rTmhCgocSVGOcbmJBFwuQz48lvmw5J9  
5ztKnpG3GP5NoBioppA4nT8FxaqKMWLcM2BMFmDM1IOTPFdiVUVqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL  
3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "e066307dc21de022",
  "total": 1,
  "code": 200,
  "success": true,
  "data": [
    {
      "accessToken": "670f8c2bb1a7477089f9ec1d65dff739",
      "refreshToken": "c83ab10b1c794ff19b659a49456f494e",
      "expire": 21600
    }
  ],
  "msg": "Operation Success !",
  "message": "Operation Success !",
  "enMessage": "Success!"
}
```

## 2.2. Refresh Token

### 2.2.1. Request Method

Post+JSON

Interface Address: : <https://www.aeropulse.cloud/server/aero-api/outer/refreshAuth>

### 2.2.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 interface	String	Y		

### 2.2.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
refreshToken	Obtained from 2.1 interface	String	Yes	Contact operations team	
timestamp	Timestamp	Long	Yes	Timestamp in milliseconds. Represents the request start time. Requests with time difference exceeding 30 seconds from server time are considered invalid.	

### 2.2.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
accessToken	Authorization Token	String	Yes	After calling this interface, businesses should use the new token promptly for business requests	
refreshToken	Refresh Token	String	Yes		
expire	Expiry Time	Date	Yes	Same as auth	

### 2.2.5. Parameter Example

Request Parameters Before Encryption:

```
{
  "refreshToken": "23829ajdfapjsldfjapdsd",
  "timestamp": 1770304331647
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIANhlibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfzOIAF5rTmhCgocSVGObmJBFwuQz48lvmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCm2BMFmDM1IOTPFDiVUVqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "code": 200,
  "success": true,
  "data": [
    {
      "expire": "2026-02-06 15:55:30",
      "accessToken": "a67d32d5646e451486a16df291862ac8",
      "refreshToken": "6ce37d5cbd4945a4aa639ba78dc598e4"
    }
  ],
  "msg": "获取 token 成功"
}
```

## 2.3. Query Associated Device List

### 2.3.1. Request Method

*Post+JSON*

*Interface Address: : <https://www.aeropulse.cloud/server/aero-api/outer/deviceList>*

### 2.3.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 or 2.2 interface	String	Yes		

### 2.3.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
pageNo	Page Number	Number	Yes	Starts from 1	
pageSize	Items Per Page	Number	Yes	Greater than or equal to 1, less than 100	

#### 2.3.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
total	Total Count	Number	Yes		
data	Data Body	Array	Yes	See data body below	

#### Data Body

Parameter	Description	Type	Required	Remarks
deviceid	Device ID	Number	Yes	This parameter will be encrypted with the provided key; users need to decrypt it upon use
deviceName	Device Name	String	Yes	
timeZone	Device Timezone	String	No	e.g., ASIA/SHANGHAI
deviceStatus	Device Status	Number	Yes	0: Offline, 1: Online
deviceMac	Device MAC Address	String	Yes	This parameter will be encrypted with the provided key; users need to decrypt it upon use
deviceIp	Device IP Address	String	No	e.g., 122.233.242.24
location	Device Location	String	No	

country	Device Location (Country)	String	No	
countryCode	Country Code	String	No	

### 2.3.5.Parameter Example

Request Parameters Before Encryption:

```
{
  "pageNo": "1",
  "pageSize": 20
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIANhlibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfzOIAF5rTmhCgocSVGOcbmJBFwuQz48lvmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCm2BMFmDM1IOTPFDiVUVqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "2208798db795ff6d",
  "total": 2,
  "code": 200,
  "success": true,
  "data": [
    {
      "deviceId": "encrypted device id",
      "deviceName": "aero_lite_test",
      "timeZone": "ASIA/SHANGHAI",
      "deviceStatus": 1,
      "deviceMac": "encrypted mac address",
      "deviceIp": "122.233.242.24",
      "location": "hangzhou",
      "country": "China",
      "countryCode": "CN"
    },
    {
      "deviceId": "encrypted device id",
      "deviceName": "aero_lite_test",
      "timeZone": "ASIA/SHANGHAI",
      "deviceStatus": 1,
      "deviceMac": "encrypted mac address",
      "deviceIp": "122.233.242.24",
      "location": "hangzhou",
      "country": "China",
      "countryCode": "CN"
    }
  ],
  "msg": "Operation success ! ",
  "message": "Operation success ! ",
  "enMessage": "Operation success!"
}
```

## 2.4. Query Associated Device Details

### 2.4.1. Request Method

*Post+JSON*

*Interface Address: <https://www.aeropulse.cloud/server/aero-api/outer/deviceDetail>*

### 2.4.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 or 2.2 interface	String	Yes		

### 2.4.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
deviceId	Device ID	Number	Yes		

### 2.4.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
total	Total Count	Number	Yes	Not greater than 1	
data	Data Body	Array	Yes	See data body below	

## Data Body

Parameter	Description	Type	Required	Remarks
deviceId	Device ID	Number	Yes	This parameter will be encrypted with the provided key; users need to decrypt it upon use
deviceName	Device Name	String	Yes	
timeZone	Device Timezone	String	No	e.g., ASIA/SHANGHAI
deviceStatus	Device Status	Number	Yes	0: Offline, 1: Online
deviceMac	Device MAC Address	String	Yes	This parameter will be encrypted with the provided key; users need to decrypt it upon use
deviceIp	Device IP Address	String	No	e.g., 122.233.242.24
location	Device Location (City)	String	No	
country	Country	String	No	
countryCode	Country Code	String	No	
airQuality	AQI	Number	Yes	
co2	CO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvoc	TVOC Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvocPpb	TVOC, ppb calculation	Number	No	Depends on device sensor collection; default -1 (no data)

tvocUgm3	TVOC, $\mu\text{g}/\text{m}^3$ calculation	Number	No	Depends on device sensor collection; default -1 (no data)
pm25	PM2.5 Level	Number	No	Depends on device sensor collection; default -1 (no data)
pm10	PM10 Level	Number	No	Depends on device sensor collection; default -1 (no data)
temperature	Temperature	Number	No	Depends on device sensor collection; default -1 (no data)
humidity	Humidity	Number	No	Depends on device sensor collection; default -1 (no data)
pressure	Pressure	Number	No	Depends on device sensor collection; default -1 (no data)
light	Light Level	Number	No	Depends on device sensor collection; default -1 (no data)
noise	Noise Level	Number	No	Depends on device sensor collection; default -1 (no data)
rsi	RSSI	Number	No	Depends on device sensor collection; default -1 (no data)
createTime	Creation Timestamp	Long	Yes	
updateTime	Update Timestamp	Long	Yes	
dataTime	Latest Data Report Timestamp	Long	Yes	

manufacturer	Device Model	String	No	Depends on device sensor collection; default -1 (no data)
battery	Battery Level	Long	No	Depends on device sensor collection; default -1 (no data)
swVersion	Firmware Version	String	No	Depends on device sensor collection; default -1 (no data)
pc03	Particle Counter 0.3µm	Number	No	Depends on device sensor collection; default -1 (no data)
pc10	Particle Counter 1.0µm	Number	No	Depends on device sensor collection; default -1 (no data)
pc25	Particle Counter 2.5µm	Number	No	Depends on device sensor collection; default -1 (no data)
nox	NOx Level	Number	No	Depends on device sensor collection; default -1 (no data)
ozone	Ozone Level	Number	No	Depends on device sensor collection; default -1 (no data)
no2	NO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
co	CO Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvTime	TVOC Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)

pmTime	PM Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
ncTime	NC Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
o3Time	O3 Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
syncType	Sync Type	Number	Yes	Data synchronization type: 0: Default no sync, 1: Cloud + self-built MQTT
hcho	HCHO Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2	H2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
so2	SO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
nh3	NH3 Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2s	H2S Level	Number	No	Depends on device sensor collection; default -1 (no data)
smell	Smell Level	Number	No	Depends on device sensor collection; default -1 (no data)
c2h40	C2H4O Level	Number	No	Depends on device sensor collection; default -1 (no data)

hchoTime	HCHO Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
h2Time	H2 Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
so2Time	SO2 Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
nh3Time	NH3 Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
h2sTime	H2S Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
smellTime	Smell Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)
c2h40Time	C2H4O Timestamp	Number	No	Depends on device sensor collection; default -1 (no data)

#### 2.4.5. Parameter Example

Request Parameters Before Encryption:

```
{
  "deviceId": 382
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIANhlibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfzOIAF5rTmhCgocSVGOcbmJBFwuQz48lvmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCM2BMFmDM1IOTPFDiVUVqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "9a42105b63213c11",
  "total": 1,
  "code": 200,
  "success": true,
  "data": [
    {
      "deviceId": "3Ajt/pHDHhwtIAxXDv9EwA==",
      "deviceName": "",
      "timeZone": "ASIA/SHANGHAI",
    }
  ]
}
```

```

"deviceStatus": 1,
"deviceMac": "OKzGysB+yBkwHsdl4pDtIA==",
"deviceIp": "218.17.64.218",
"location": "",
"country": "China",
"countryCode": "CN",
"airQuality": 27.80,
"co2": 523.00,
"tvoc": 92.00,
"tvocPpb": 50,
"tvocUgm3": 225,
"pm25": 5.00,
"pm10": 5.00,
"temperature": 28.98,
"humidity": 41.00,
"pressure": 1009.00,
"light": 0.00,
"noise": 50.00,
"rsi": -21.00,
"createTime": 1760169308000,
"updateTime": 1771925648000,
"dataTime": 1771925700000,
"manufacturer": "A101C",
"battery": 65535,
"swVersion": "40023",
"pc03": 454.00,
"pc10": 0.00,
"pc25": 0.00,
"nox": 1.00,
"ozone": -1.00,
"no2": -1.00,
"co": -1.00,
"tvTime": 884.00,
"pmTime": 1060.00,
"ncTime": 0.00,
"o3Time": 0.00,
"syncType": 0,
"hcho": -1,
"h2": -1,
"so2": -1,
"nh3": -1,
"h2s": -1,
"smell": -1,
"c2h40": -1,
"hchoTime": -1,
"h2Time": -1,
"so2Time": -1,
"nh3Time": -1,
"h2sTime": -1,
"smellTime": -1,
"c2h40Time": -1
}
],
"msg": "Operation success ! ",
"message": "Operation success ! ",
"enMessage": "Success!"
}

```

## 2.5. Query Device Latest Data - Single

### 2.5.1. Request Method

*Post+JSON*

*Interface Address : <https://www.aeropulse.cloud/server/aero-api/outer/deviceLatestData>*

### 2.5.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 or 2.2 interface	String	Yes		

### 2.5.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
deviceId	Device ID	Number	Yes		

### 2.5.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
total	Total Count	Number	Yes		
data	Data Body	Array	Yes	See data body below	

### Data Body

Parameter	Description	Type	Required	Remarks
airQuality	AQI	Number	Yes	
co2	CO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)

tvoc	TVOC Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvocPpb	TVOC, ppb calculation	Number	No	Depends on device sensor collection; default -1 (no data)
tvocUgm3	TVOC, $\mu\text{g}/\text{m}^3$ calculation	Number	No	Depends on device sensor collection; default -1 (no data)
pm25	PM2.5 Level	Number	No	Depends on device sensor collection; default -1 (no data)
pm10	PM10 Level	Number	No	Depends on device sensor collection; default -1 (no data)
temperature	Temperature	Number	No	Depends on device sensor collection; default -1 (no data)
humidity	Humidity	Number	No	Depends on device sensor collection; default -1 (no data)
pressure	Pressure	Number	No	Depends on device sensor collection; default -1 (no data)
light	Light Level	Number	No	Depends on device sensor collection; default -1 (no data)
noise	Noise Level	Number	No	Depends on device sensor collection; default -1 (no data)
rsi	RSSI	Number	No	Depends on device sensor collection; default -1 (no data)
createTime	Creation Timestamp	Long	Yes	

updateTime	Update Timestamp	Long	Yes	
dataTime	Latest Data Report Timestamp	Long	Yes	
pc03	Particle Counter 0.3µm	Number	No	Depends on device sensor collection; default -1 (no data)
pc10	Particle Counter 1.0µm	Number	No	Depends on device sensor collection; default -1 (no data)
pc25	Particle Counter 2.5µm	Number	No	Depends on device sensor collection; default -1 (no data)
nox	NOx Level	Number	No	Depends on device sensor collection; default -1 (no data)
ozone	Ozone Level	Number	No	Depends on device sensor collection; default -1 (no data)
no2	NO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
co	CO Level	Number	No	Depends on device sensor collection; default -1 (no data)
hcho	HCHO Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2	H2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
so2	SO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)

nh3	NH3 Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2s	H2S Level	Number	No	Depends on device sensor collection; default -1 (no data)
smell	Smell Level	Number	No	Depends on device sensor collection; default -1 (no data)
c2h4o	C2H4O Level	Number	No	Depends on device sensor collection; default -1 (no data)

### 2.5.5. Parameter Example

Request Parameters Before Encryption:

```
{
  "deviceId": "338"
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIAnhlibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfzOlAF5rTmhCgocSVGOcbmJBFwuQz48lvmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCm2BMFmDM11OTPFDiVUVqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "e1a2b69114ca68dd",
  "total": 1,
  "code": 200,
  "success": true,
  "data": [
    {
      "airQuality": 22.24,
      "co2": 523.00,
      "tvoc": 93.00,
      "tvocPpb": 50,
      "tvocUgm3": 228,
      "pm25": 4.00,
      "pm10": 5.00,
      "temperature": 28.97,
      "humidity": 41.00,
      "pressure": 1009.00,
      "light": 0.00,
      "noise": 50.00,
      "rsi": -21.00,
      "createTime": 1771925709000,
      "updateTime": null,
      "dataTime": 1771925760000,
      "pc03": 442.00,
      "pc10": 0.00,
      "pc25": 0.00,
      "nox": 1.00,
      "ozone": -1.00,
      "no2": -1.00,
      "co": -1.00,
      "hcho": -1,
    }
  ]
}
```

```

    "h2": -1,
    "so2": -1,
    "nh3": -1,
    "h2s": -1,
    "smell": -1,
    "c2h40": -1
  }
],
"msg": "Operation success ! ",
"message": "Operation success ! ",
"enMessage": "Success!"
}

```

## 2.6. Query Device Historical Data - Paginated

### 2.6.1. Request Method

*Post+JSON*

*Interface Address: <https://www.aeropulse.cloud/server/aero-api/outer/deviceHisData>*

### 2.6.2. Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 or 2.2 interface	String	Yes		

### 2.6.3. Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
deviceId	Device ID	Number	Yes		
pageNo	Page Number	Number	Yes	Starts from 1	
pageSize	Items Per Page	Number	Yes	Maximum 100 per page, default 10	
startDate	Start Date	String	No	Format: YYYY-MM-DD	

endDate	End Date	String	No	Format: YYYY-MM-DD	
---------	----------	--------	----	--------------------	--

#### 2.6.4. Response Parameters

Parameter	Description	Type	Required	Remarks	Other
total	Total Count	Number	Yes		
data	Data Body	Array	Yes	See data body below	

#### Data Body

Parameter	Description	Type	Required	Remarks
Id	Data Record ID	Number	Yes	
airQuality	AQI	Number	Yes	
co2	CO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvoc	TVOC Level	Number	No	Depends on device sensor collection; default -1 (no data)
tvocPpb	TVOC, ppb calculation	Number	No	Depends on device sensor collection; default -1 (no data)
tvocUgm3	TVOC, $\mu\text{g}/\text{m}^3$ calculation	Number	No	Depends on device sensor collection; default -1 (no data)
pm25	PM2.5 Level	Number	No	Depends on device sensor collection; default -1 (no data)

pm10	PM10 Level	Number	No	Depends on device sensor collection; default -1 (no data)
temperature	Temperature	Number	No	Depends on device sensor collection; default -1 (no data)
humidity	Humidity	Number	No	Depends on device sensor collection; default -1 (no data)
pressure	Pressure	Number	No	Depends on device sensor collection; default -1 (no data)
light	Light Level	Number	No	Depends on device sensor collection; default -1 (no data)
noise	Noise Level	Number	No	Depends on device sensor collection; default -1 (no data)
rsSI	RSSI	Number	No	Depends on device sensor collection; default -1 (no data)
createTime	Creation Timestamp	Long	Yes	
updateTime	Update Timestamp	Long	Yes	
dataTime	Latest Data Report Timestamp	Long	Yes	
pc03	Particle Counter 0.3µm	Number	No	Depends on device sensor collection; default -1 (no data)
pc10	Particle Counter 1.0µm	Number	No	Depends on device sensor collection; default -1 (no data)

pc25	Particle Counter 2.5µm	Number	No	Depends on device sensor collection; default -1 (no data)
nox	NOx Level	Number	No	Depends on device sensor collection; default -1 (no data)
ozone	Ozone Level	Number	No	Depends on device sensor collection; default -1 (no data)
no2	NO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
co	CO Level	Number	No	Depends on device sensor collection; default -1 (no data)
hcho	HCHO Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2	H2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
so2	SO2 Level	Number	No	Depends on device sensor collection; default -1 (no data)
nh3	NH3 Level	Number	No	Depends on device sensor collection; default -1 (no data)
h2s	H2S Level	Number	No	Depends on device sensor collection; default -1 (no data)
smell	Smell Level	Number	No	Depends on device sensor collection; default -1 (no data)

c2h40	C2H4O Level	Number	No	Depends on device sensor collection; default -1 (no data)
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### 2.6.5. Parameter Example

Request Parameters Before Encryption:

```
{
  "startDate": "2026-02-01",
  "endDate": "2026-02-07",
  "pageNo": 3,
  "pageSize": 100,
  "deviceId": "564"
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLrl8ardGmBkXgeEog6hNnM/dnc/8jAZkNAZIAnhlibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfzOIAF5rTmhCgocSVGOcbmJBFwuQz48lvmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCm2BMFmDM11OTPFDiVUVUvqjs6d2tqzOhS7bw+ObtaV41MNox7PL6lmlqj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "ccf8deb6425b196f",
  "total": 42999,
  "code": 200,
  "success": true,
  "data": [
    {
      "id": 20953100,
      "airQuality": 16.68,
      "co2": 505.00,
      "tvoc": 78.00,
      "tvocPpb": 42,
      "tvocUgm3": 192,
      "pm25": 3.00,
      "pm10": 3.00,
      "temperature": 28.72,
      "humidity": 42.00,
      "pressure": 1009.00,
      "light": 100.00,
      "noise": 52.00,
      "rssi": -21.00,
      "createTime": 1772077381000,
      "updateTime": null,
      "dataTime": 1772077440000,
      "pcO3": 356.00,
      "pc10": 0.00,
      "pc25": 0.00,
      "nox": 1.00,
      "ozone": -1.00,
      "no2": -1.00,
      "co": -1.00,
      "hcho": -1,
      "h2": -1,
      "so2": -1,
      "nh3": -1,
      "h2s": -1,
      "smell": -1,
      "c2h40": -1
    },
    {
      "id": 20953051,
      "airQuality": 16.68,
      "co2": 503.00,
      "tvoc": 77.00,
      "tvocPpb": 42,
      "tvocUgm3": 189,
      "pm25": 3.00,

```

```
"pm10": 3.00,  
"temperature": 28.70,  
"humidity": 42.00,  
"pressure": 1009.00,  
"light": 100.00,  
"noise": 57.00,  
"rssi": -22.00,  
"createTime": 1772077320000,  
"updateTime": null,  
"dataTime": 1772077380000,  
"pc03": 361.00,  
"pc10": 0.00,  
"pc25": 0.00,  
"nox": 1.00,  
"ozone": -1.00,  
"no2": -1.00,  
"co": -1.00,  
"hcho": -1,  
"h2": -1,  
"so2": -1,  
"nh3": -1,  
"h2s": -1,  
"smell": -1,  
"c2h40": -1  
}  
],  
"msg": "Operation success ! ",  
"message": "Operation success ! ",  
"enMessage": "Operation success!"  
}
```

## 2.7. Query Historical Aggregated Device Data-Paginated

### 2.7.1 Request Method

Post+JSON

Interface Address: <https://www.aeropulse.cloud/server/aero-api/outer/deviceHisAggData>

### 2.7.2 Header Parameters

Parameter	Description	Type	Required	Remarks	Other
Api-Content-Auth	Obtained from 2.1 or 2.2 interface	String	Y		

### 2.7.3 Request Body Parameters

Parameter	Description	Type	Required	Remarks	Other
aggType	Aggregation Types	Number	Y	1: 5 Minutes, 2: 10 Minutes, 3: 15 Minutes, 4: 30 Minutes, 5: 1 Hour	
deviceId	Device ID	Number	Y		
pageNo	Page Number	Number	Y	Starts from 1	
pageSize	Items Per Page	Number	Y	Maximum 100 per page, default 100	
startDate	Start Date	String	N	Format: YYYY-MM-DD	
endDate	End Date	String	N	Format: YYYY-MM-DD	

### 2.7.4 Response Parameters

Parameter	Description	Type	Required	Remarks	Other
total	Total Count	Number	Y		
Data	Data Body	Array	Y		See data body below

## Data Body

Parameter	Description	Type	Required	Remarks
Id	Data Record ID	Number	Y	
aggType	Aggregation Types	Array	Y	1: 5 Minutes, 2: 10 Minutes, 3: 15 Minutes, 4: 30 Minutes, 5: 1 Hour
airQuality	AQI	Number	Y	
co2		Number	N	Depends on device sensor collection; default -1 (no data)
tvoc		Number	N	Depends on device sensor collection; default -1 (no data)
tvocPpb	TVOC, ppb calculation	Number	N	Depends on device sensor collection; default -1 (no data)
tvocUgm3	TVOC, $\mu\text{g}/\text{m}^3$ calculation	Number	N	Depends on device sensor collection; default -1 (no data)
pm25		Number	N	Depends on device sensor collection; default -1 (no data)
pm10		Number	N	Depends on device sensor collection; default -1 (no data)

temperature		Number	N	Depends on device sensor collection; default -1 (no data)
humidity		Number	N	Depends on device sensor collection; default -1 (no data)
pressure		Number	N	Depends on device sensor collection; default -1 (no data)
light		Number	N	Depends on device sensor collection; default -1 (no data)
noise		Number	N	Depends on device sensor collection; default -1 (no data)
rsi		Number	N	Depends on device sensor collection; default -1 (no data)
createTime	Creation Timestamp	Long	Y	
updateTime	Update Timestamp	Long	Y	
dataTime	Latest Data Report Timestamp	Long	Y	
pc03		Number	N	Depends on device sensor collection; default -1 (no data)
pc10		Number	N	Depends on device sensor collection; default -1 (no data)
pc25		Number	N	Depends on device sensor collection; default -1 (no data)
nox		Number	N	Depends on device sensor collection; default -1 (no data)
ozone		Number	N	Depends on device sensor collection; default -1 (no data)

no2		Number	N	Depends on device sensor collection; default -1 (no data)
co		Number	N	Depends on device sensor collection; default -1 (no data)
hcho		Number	N	Depends on device sensor collection; default -1 (no data)
h2		Number	N	Depends on device sensor collection; default -1 (no data)
		Number	N	Depends on device sensor collection; default -1 (no data)
nh3		Number	N	Depends on device sensor collection; default -1 (no data)
h2s		Number	N	Depends on device sensor collection; default -1 (no data)
smell		Number	N	Depends on device sensor collection; default -1 (no data)
c2h4O		Number	N	Depends on device sensor collection; default -1 (no data)

## 2.7.5 Parameter Example

Request Parameters Before Encryption:

```
{
  "startDate": "2026-02-01",
  "endDate": "2026-02-07",
  "pageNo": 3,
  "pageSize": 100,
  "aggType": 1,
  "deviceId": "564"
}
```

Request Parameters After Encryption:

```
{"data": "Jwpgda8MyV5x2+G9qzXpuWjxUFBDC+DHJD/d9qzXIZVRG7zLr18ardGmBkXgeEog6hNnM/dnc/8jAZkNAZ1Anh1ibhc1n+Ba5ksqtjQvaqsv8pUkhRjh7hd6c+9u6SxEXGikEyNOFrGdxqi3Cx+anw==", "key": "jE5+0k8Tss0WA80wfz0IAF5rTmhCgocSVG0cbmJBFwuQz48Ivmw5J95ztKnpG3GP5NoBioppA4nT8FxaqKMWLCm2BMFmDM110TPFDiVUVqjs6d2tqz0hS7bw+ObtaV41Mnox7PL61m1qj/RIZdP9A3LsK5voQX+CFL3kPrL7GVA="}
```

Response Parameters:

```
{
  "requestId": "ccf8deb6425b196f",
  "total": 42999,
  "code": 200,
  "success": true,
  "data": [
    {
      "id": 20953100,
      "aggType": 1,
      "airQuality": 16.68,
      "co2": 505.00,
      "tvoc": 78.00,
      "tvocPpb": 42,
      "tvocUgm3": 192,
      "pm25": 3.00,
      "pm10": 3.00,
      "temperature": 28.72,
      "humidity": 42.00,
      "pressure": 1009.00,
      "light": 100.00,
      "noise": 52.00,
      "rssi": -21.00,
      "createTime": 1772077381000,
      "updateTime": null,
      "dataTime": 1772077440000,
      "pc03": 356.00,
      "pc10": 0.00,
      "pc25": 0.00,
      "nox": 1.00,
      "ozone": -1.00,
      "no2": -1.00,
      "co": -1.00,
      "hcho": -1,
      "h2": -1,
      "so2": -1,
      "nh3": -1,
      "h2s": -1,
      "smell": -1,
      "c2h40": -1
    }
  ],
  "msg": "Operation success! ",
  "message": "Operate success! ",
  "enMessage": "Operate success!"
}
```