

((SENSONEO))

Rest API

2018

www.sensoneo.com/knowledge

OVERVIEW

Some of the customers or partners require possibility to get the data from Sensoneo Smart Waste Management System. Sensoneo offers easy to use REST API to get the data of respective customer. The only requirement is to obtain API KEY from the Sensoneo team to ensure access authorization and the fact that only data of respective customer are delivered via the connection.

BIN DATA

Request

GET <https://prodapiv1.sensoneo.com/data/container>

> Content-Type: application/json

> x-api-key: "[CUSTOMER API KEY]"

Response

Status 200 OK

E.g:

```
{
```

```
"containers": [
```

```
{
```

```
"id": 19, // unique internal bin id
```

```
"code": "S0200C00998", // unique bin code
```

```
"latitude": "48.3113415", // bin latitude
```

```
"longitude": "18.100520400000005", // bin longitude
```

```
"address": "Trieda Andreja Hlinku 14-16", // street and house number
```

```
"district": "Nitra", // district
```

```
"postal_code": "94901", // postal code
```

```
"total_volume": "3000", // bin volume
```

```
"trash_type": "glass", // bin trash type
"prediction": "2019-03-14T12:23:49.000Z", // prediction -> UTC timestamp when
the bin will be full (75%) based on the calculation
"bin_type": "OR_GBR", // bin type
"installed_at": "2019-01-10T12:00:00.000Z" // installation timestamp if available
},
...
]
```

Explanation:

Code "S0200C00998" is created by unique combination of the STAND CODE S0200 and BIN CODE C00998.

Status 400 Bad request

```
{
"error": "no-api-key"
}
```

Status 401 Unauthorized

```
{
"error": "unauthorized"
}
```

Status 500 Server error

BIN MEASUREMENT DATA

Request

POST <https://prodapiv1.sensoneo.com/data/measurement>

> Content-Type: application/json

> x-api-key: "[CUSTOMER API KEY]"

Body:

```
{  
  "container_ids": [1207, 1206], // optional parameter, list of container ids  
  "codes": ["S01C01","S01C02"], // optional parameter, list of container codes  
  "from" : "2017-11-11", // required parameter, date from  
  "to" : "2018-01-01" // required parameter, date to  
}
```

Explanation:

Codes optionally defines bins which are *unique combination of the STAND CODE S01 and BIN CODE C01*. If empty, all measurement of all bins for specific customer in given time frame will be returned.

Response

Status 200 OK

E.g:

```
{  
  "measurements": [  
    {  
      "id": 1715225, // unique internal measurement id  
      "container_id": "1207", // unique internal bin id  
      "code": "S1040C10402", // unique bin code
```

```
"percent_calculated": 100, // trash fullness
"upturned": 1, // if container is upturned or flipped
"temperature": 14, // air temperature
"battery_status": 3.6, // battery voltage
"measured_at": "2017-12-14T21:02:46.000Z", // obsolete, please use
measured_at_utc
"measured_at_utc": "2017-12-14T21:02:46.000Z", // measurement timestamp in
UTC
"prediction": "2017-12-18T21:07:34.000Z", // obsolete, please use prediction_utc
"prediction_utc": "2017-12-18T21:07:34.000Z" // prediction -> UTC timestamp
when the bin will be full (75%) based on the calculation
},
...
]
```

Explanation:

Code "S0200C00998" is created by unique combination of the STAND CODE S0200 and BIN CODE C00998

Status 400 Bad request

Missing or failed parameters:

```
{
"error": {
"from": {
"param": "from",
"msg": "err_invalid_date"
},
"to": {
```

```
"param": "to",  
"msg": "err_invalid_date"  
}  
}  
}
```

No api key defined:

```
{  
"error": "no-api-key"  
}
```

Status 401 Unauthorized

```
{  
"error": "unauthorised"  
}
```

Status 500 Server error

PICKUPS DATA

Request

POST https://prodapiv1.sensoneo.com/data/picks

> Content-Type: application/json

> x-api-key: "[CUSTOMER API KEY]"

Body:

```
{  
"container_ids": [1207, 1206], // optional parameter, list of container ids  
"codes": ["S01C01", "S01C02"], // optional parameter, list of container codes  
"from" : "2017-11-11", // required parameter, date from
```

```
"to" : "2018-01-01"  // required parameter, date to
}
```

Explanation:

Codes optionally defines bins which are *unique combination of the STAND CODE S01 and BIN CODE C01*. If empty, all measurement of all bins for specific customer in given time frame will be returned.

Response

Status 200 OK

E.g:

```
{
  "measurements": [
    {
      "id": 1715225,  // unique internal measurement id
      "container_id": "1207",  // unique internal bin id
      "code": "S1040C10402",  // unique bin code
      "pick_at": "2017-06-16T18:27:32.000Z",  // obsolete, please use pick_at_utc
      "pick_at_utc": "2017-06-16T18:27:32.000Z",  // pickup timestamp in UTC
      "percent_before": 23,  // fullness before pickup
      "percent_now": 4,  // fullness after pickup
      "event_driven": false  // pickup based on sensor event (true) or based on data
                             calculation (false)
    },
    ...
  ]
}
```

Explanation:

Code "S0200C00998" is created by unique combination of the STAND CODE S0200 and BIN CODE C00998

Status 400 Bad request

Missing or failed parameters:

```
{
  "error": {
    "from": {
      "param": "from",
      "msg": "err_invalid_date"
    },
    "to": {
      "param": "to",
      "msg": "err_invalid_date"
    }
  }
}
```

No api key defined:

```
{
  "error": "no-api-key"
}
```

Status 401 Unauthorized

```
{
  "error": "unauthorised"
}
```

Status 500 Server error

OPENING MONITOR DATA

Request

POST https://prodapiv1.sensoneo.com/data/opening_monitor

> Content-Type: application/json

> x-api-key: "[CUSTOMER API KEY]"

Body:

```
{
  "container_ids": [1207, 1206], // optional parameter, list of container ids
  "codes": ["S01C01","S01C02"], // optional parameter, list of container codes
  "from" : "2017-11-11", // required parameter, date from
  "to" : "2018-01-01" // required parameter, date to
}
```

Explanation:

Codes optionally defines bins which are *unique combination of the STAND CODE S01 and BIN CODE C01*. If empty, all measurement of all bins for specific customer in given time frame will be returned.

Response

Status 200 OK

E.g:

```
{
  "measurements": [
    {
      "id": 1715225, // unique internal measurement id
      "container_id": "1207", // unique internal bin id
      "code": "S1040C10402", // unique bin code
      "opening_blocked": "false" // bin opening is blocked if true, otherwise false
    }
  ]
}
```

```
},
```

```
...
```

```
]
```

```
}
```

Explanation:

Code "S0200C00998" is created by unique combination of the STAND CODE S0200 and BIN CODE C00998

Status 400 Bad request

Missing or failed parameters:

```
{
```

```
"error": {
```

```
"from": {
```

```
"param": "from",
```

```
"msg": "err_invalid_date"
```

```
},
```

```
"to": {
```

```
"param": "to",
```

```
"msg": "err_invalid_date"
```

```
}
```

```
}
```

```
}
```

No api key defined:

```
{
```

```
"error": "no-api-key"
```

```
}
```

Status 401 Unauthorized



```
{  
  "error": "unauthorised"  
}
```

Status 500 Server error



**Sensoneo enables
a world that is
green, clean and
free of litter**

Sensoneo

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