How to use Stock Level Check Request API – V1.1

Contents

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1. Preamble

This document describes how to use Schneider Electric Stock Level Check Request - Current Stock Quantity API v. 1.1

2. Overview

Stock Level Check Request is a RESTful API service by Schneider Electric, providing the available stock for the desired product at associated SE warehouse. Available stock is exactly the number of products currently in stock and available for the order, so the usage of this information may vary very widely.

You don't have to worry about mapping your account to Schneider Electric warehouse – this mapping is already done within our systems, so you only have to provide the credentials listed below.

The service is represented by two methods aiming one goal. The difference between them is regarding the multiple product call support (the POST method supports up to 20, GET method supports only one) and type of the input varieties. The choice of what method to use is generally defined by the country you are located in. Please check the "Geography" section to know which method is used in your country.

The type of the input (product reference type) used in POST method is nothing more than type of product ID. It can be Customer Material Number, EL Number, EAN code or SE Material Number – whatever type of product ID is used in your business processes. You are welcome to use any of them.

Details:

POST method:

- Geography: Nordics and Australia

 - Product references requested per API call is up to 20

- Types of product references:

    1. Customer Material Number
    2. EL Number
    3. EAN Code
    4. SE Material Number

GET method:

- Geography: NAM (US and Canada), India and Russian Federation

- Single product reference requested per one API call

- Type of product reference: SE material number

3. Getting Started

What you will need

First, you'll have to decide which method to use based on your geography.

GET method:

- o NAM zone
- o Russia
- o India

POST method:

- o Nordics
- o Australia

The only three things you will require to work with both methods, are:

- o A Client ID (login); -
- o A Client Secret (password);
- o In order to get correct Client ID and Client Secret, please request your local Schneider Electric contact.

If you belong to the region using the GET method, please know that you may also use the so-called Purchaser ID (the ID of your account in mySE system – an application which most of the Schneider Electric customers use to place orders – and one of the linked Ship-To (the ID of your address). These parameters are not mandatory but allow additional flexibility of service usage. They are best defined if your company has several mySE accounts or different of your addresses are linked to different SE warehouses. To know them, please reach your local SE contact or login to the mySE system.

4. Base logic

1. Decide which method you'll be using depending on the country you're located in (GET: NAM zone, Russia, India; POST: Nordics, Australia);

2. Obtain the temporary token using the Client ID and Client Secret (see the "Access token" (link) section for more info);

3. Define necessary parameters per API method used along with additional details if applicable (GET: Purchaser ID and ShipTo as well as Product Reference; POST – list of Product References);

 4. Combine the correct request using the parameters above and the base URL below;

5. Get the response;

6. Parse the response and get the required data from it

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5. API Endpoint (Base URL)

Token URLs

Environment	Token URL
Production	https://api.se.com/token

Environment	API URL
Production	https://api.se.com/productstocklevelchecker/1.1/products/*

6. Authentication

Bearer authentication is a security scheme of http type and bearer scheme. Please visit the "Authorization" section in the getting started for more information.

Token Generation Sample using Postman:

1. Select POST and enter the Token URL.
2. From the Body tab, click on radio button x-www-form-urlencoded.
3. Manually enter Key and Value, "grant_type" and "client_credentials".
4. From the Authorization tab, select Type "Basic Auth".
5. Set Username to the **client key** (provided to you by the APIFIRST team offline).
6. Set Password to the **client secret** (provided to you by the APIFIRST team offline).
7. Send request and retrieve value of **access_token** from the response message.

Sample curl for Token

```
curl -X POST \
  https://api.se.com/token \
  -H 'Accept: */*' \
  -H 'Authorization: Basic
OFNkWlFqTVVGbWthNG1tVVhvTGUxajcxY2VHQUxBczY6YzQ0MjlOa1VMS3FRQkJDMA=='
\
  -d grant_type=client_credentials
```

7. Requests

The request should match the following structure.

1. GET Requests

URL : https://api.se.com/productstocklevelchecker/1.1/products/<ProductReference>?shipTo=<10 digit-ID>

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HTTP METHOD: GET

HTTP HEADERS:

Authorization: Bearer {token}

Accept: application/json

2. **Post Requests** :

URL: https://api.se.com/productstocklevelchecker/1.1/products /stock - levels

HTTP Method: POST

HTTP Headers:

- o   Authorization: Bearer <token>
- o   Accept: application/json

Request Body:

```
{
  "productsList": [
    {
      "productReference": "ISM14100",
      "referenceType": 4
    },
    {
      "productReference": "ISM1410 1 ",
      "referenceType": 3
    }
  ]
}
```

8. Responses

The response will be in JSON data format and follow the following structure:

HTTP Status Code: 200 OK

GET:

Response Body:

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```json
{
    "productRef": "A9F79106",
    "shipTo": "1000033834",
    "warehouseList": [
        {
            "name": "RU01 Central DC",
            "stockLevel": 3186
        }
    ]
}
```

POST :

Response Body:

```json
{
    "stockLevelDetails": [
        {
            "productReference": "ISM14100",
            "productDescription": "OptiLine minikanal 12x20 1 rum hvid PVC",
            "referenceType": 4,
            "unitOfMeasure": "M",
            "stockLevel": 4536.000,
            "statusMessage": "Stocked product; please check the \ "stockLevel \ " value.",
            "statusCode": "200 - 00"
        },
        {
            "productReference": "ISM1410 1 ",
            "productDescription": "OptiLine minikanal 12x20 2 rum hvid PVC",
            "referenceType": 3,
```

```
        "unitOfMeasure": "M",

        "stockLevel": 32 36.000,

        "statusMessage": "Stocked product; please check the \ "stockLevel \ " value.",

        "statusCode": "200 - 00"

    }

  ]

}
```

9. Status Codes

The API uses the following response status codes:

STATUS CODE	DESCRIPTION
200	OK. The request has succeeded. Please proceed with parsing the response
400	Bad Request. Something went wrong and the server cannot recognize the request. Please check if the call is corresponding the described structure and try once more.
401	Invalid token. It might be that your token has expired; please request a new one (link to the Authorization page) and try once again.
404	Not found. The call structure is correct, but this set of the inputs cannot be found. Please check the Error Message for more info. Possible error codes (all are string): " Empty_OrderNumber": Applicable for Order Details and Shipping Schedule methods. Please check if you have provided the Order Number parameter as it's mandatory. " Invalid_Input": One of the inputs provided is wrong. Please check the parameters. " Invalid_OrderNumber": The Order Number is provided, but we cannot find anything related to it. Please provide another Order Number. " Empty_ItemNumber": Applicable for Shipment Schedule method. Please check if you've provided the Item Number.
500	Fault from server. Seems like we're having some issues with the server. Please try again later, it won't take long.