

## **Futures. Open interest intraday**

### **Getting the data**

The data is available for viewing and downloading only after [subscribing](#)

### **Where to look?**

Data for all available contracts

<https://iss.moex.com/iss/analyticalproducts/futoi/securities/>

Data for single selected contract (indicate a two-character contract code, e.g. Si)

<https://iss.moex.com/iss/analyticalproducts/futoi/securities/si>

All data for the specified date

<https://iss.moex.com/iss/analyticalproducts/futoi/securities?date=2020-05-12>

Data for single contract for a specified time-period (Si, from May 12 to May 15)

<https://iss.moex.com/iss/analyticalproducts/futoi/securities/si?from=2020-05-12&till=2020-05-15>

*Be sure you are logged in to the web site*

### **Manual download**

Data for all available contracts

<https://iss.moex.com/iss/analyticalproducts/futoi/securities.csv>

Data for single selected contract (indicate a two-character contract code, e.g. Si)

<https://iss.moex.com/iss/analyticalproducts/futoi/securities/si.csv>

All data for the specified date

<https://iss.moex.com/iss/analyticalproducts/futoi/securities.csv?date=2020-05-12>

Data for single contract for a specified time-period (Si, from May 12 to May 15)

<https://iss.moex.com/iss/analyticalproducts/futoi/securities/si.csv?from=2020-05-12&till=2020-05-15>

*Be sure you are logged in to the web site*

### **Automated download**

Data is provided via the Moscow Exchange API (ISS) in csv, json, and xml formats. There are two methods for getting data:

- All instruments for the specified date – <https://iss.moex.com/iss/reference/808>
- Single instrument for the specified period – <https://iss.moex.com/iss/reference/809>

Sample requests can be found in the section «Manual download» above. By changing the csv in the request to json or xml, get the data in the appropriate format. The limit on the number of records per request is 1000. For all API features, see the [description](#) (including authentication).

## Python code example for getting data

```
# coding: utf-8

import pandas as pd
import requests as re
from io import StringIO

s = re.Session()

#login – email, specified when registering on the web site moex.com
#password – password for the account on the web site moex.com
s.get('https://passport.moex.com/authenticate', auth=(login, password))

headers = {"User-Agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10.14; rv:66.0) Gecko/20100101 Firefox/66.0"}
cookies = {'MicexPassportCert': s.cookies['MicexPassportCert']}

url = 'https://iss.moex.com/iss/analyticalproducts/futoi/securities.csv'
req = re.get(url, headers=headers, cookies = cookies)

# Further, the csv data can be converted to pandas DataFrame
data = StringIO(req.text)
X = pd.read_csv(data, ';', skiprows = 2)
```