



FastConnectData API Specs

V 2.0



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Date	Changed by	Description	Version
04/05/2020		Created	1.0
26/10/2020		Update FC data to new version	1.1
04/01/2021		Update FC data API AccessToken	2.0
02/04/2021		Add EstIndexVal field into 3.4	2.0
06/04/2021		Update separate msg Marketdata into Msg Trade Data and Quote data	2.0
010/05/2022		Bổ sung input Streaming MarketData	2.0

1. Introduction

FastConnect Data is one of the feature of our Application Programming Interface (i.e API), which is an environment enabling our customers able to trade and/or perform analysis by their own applications. FC Data includes the market data and fundamental information. Depending on the user accessibility level, user may get daily closing information of the securities, intra-day securities detail

We support .Net, Javascript, Java and Python environments.

2. Environment information

Service Name	Env Name	Host	Port	Requires VPN
DataAPI	Prod	https://fc-market.ssi.com.vn		

3. Market data streaming

Data Streaming in FastConnect is taken care by its sub-system, Information Distribution Service (IDS). IDS is a subscription basis data pushing facility. This version of IDS focuses on the streaming of market data as well as status of active orders. In the near future, more information will be added such as company profile, back testing facilities, and others

3.1 Securities Status

Input: F: symbols

Example: F:SSI or F:SSI-PAN or F:ALL

Output

STT	Name of Element	Type	Description	Value/ Format
1	Rtype	String	This is a fixed value to identify the value of this record for what type of information	F: Securities Status
2	MarketId		The ID of their corresponding Exchange where the equity is trading	HOSE HNX HNBOND UPCOM DER
3	TradingDate	Date	Date & time of data record	DDMMYYYY
	Time	Time		24HHMMSS
4	Symbol	String	Ticker of the securities	Symbol of stock

5	TradingSession	String	Session status of the market	Have the following value: ATO: Opening Call Auction LO: Continuous Trading ATC: Closing All Auction PT: Putthrough C: Market Close BREAK: Lunch Break HALT: Market Halt
6	TradingStatus	String		Have the following values: N: Normal – Giao dịch bình thường D: Delisted – Bị hủy niêm yết H: Halt – Tạm dừng giao dịch giữa phiên S: Suspend – Ngừng giao dịch NL: New List – Niêm yết mới ND: Sáp hủy niêm yết ST: Special Trading – Giao dịch đặc biệt SA: Suspend A – Bị ngưng giao dịch khớp lệnh SP: Suspend PT – Ngừng giao dịch khớp lệnh thỏa thuận
	Exchange			HOSE HNX

Example:

```
{ datatype: 'F',
  content:
```

```
{ "Rtype": "F", "MarketId": "HNX", "TradingDate": "04/05/2020", "Time": "15:00:16", "Symbol": "DPS", "TradingSession": "C", "TradingStatus": "NT", "Exchange": "HNX" }
```

3.2 Market Data**Separate msg Marketdata into Msg Trade Data and Quote data****Input : X: Symbol****VD: X-QUOTE: ALL, X-TRADE: ALL****Output:**

No.	Name of Element	Type	Description	Valid Value or Format
1.	Rtype	String		X: Stock price
2.	TradingDate	Date		DDMMYYYY
3.	Time	Time		HHMMSS

4.	ISIN	String	ISIN code	
5.	Symbol	String	Local ticker	Symbol of stock
6.	Ceiling	Number	Ceiling price	
7.	Floor	Number	Floor price	
8.	RefPrice	Number	Reference price	
9.	Open	Number	The opening price of the equity	
10.	Close	Number	The closing price of the equity	
11.	High	Number	Highest matched price in the date of report	
12.	Low	Number	Lowest matched price in the date of report.	
13.	Avg	Number	Average price of the security	
14.	PriorVal	Number	The closing price of previous trading day of the report date.	
15.	LastPrice	Number	Latest matched price	
16.	Change	Number	Change	
17.	RatioChange	Number	Ratio Change	
18.	EstMatchedPrice	Number	Estimate Matched Price	
19.	LastVol	Number	Latest matched volume	
20.	TotalVal	Number	Total matched value from market opening till the reporting time.	
21.	TotalVol	Number	Total matched volume from market opening till the reporting time.	
22.	BidPrice1	Number	Best bid price 1	
23.	BidVol1	Number	Best bid volume 1	
24.	BidPrice2	Number	Best bid price 2	
25.	BidVol2	Number	Best bid volume 2	
26.	BidPrice3	Number	Best bid price 3	
27.	BidVol3	Number	Best bid volume 3	
28.	BidPrice4	Number	Best bid price 4	
29.	BidVol4	Number	Best bid volume 4	
30.	BidPrice5	Number	Best bid price 5	
31.	BidVol5	Number	Best bid volume 5	
32.	BidPrice6	Number	Best bid price 6	
33.	BidVol6	Number	Best bid volume 6	
34.	BidPrice7	Number	Best bid price 7	
35.	BidVol7	Number	Best bid volume 7	
36.	BidPrice8	Number	Best bid price 8	
37.	BidVol8	Number	Best bid volume 8	
38.	BidPrice9	Number	Best bid price 9	
39.	BidVol9	Number	Best bid volume 9	
40.	BidPrice10	Number	Best bid price 10	
41.	BidVol10	Number	Best bid volume 10	
42.	AskPrice1	Number	Best Ask price 1	
43.	AskVol1	Number	Best Ask volume 1	

44.	AskPrice2	Number	Best Ask price 2	
45.	AskVol2	Number	Best Ask volume 2	
46.	AskPrice3	Number	Best Ask price 3	
47.	AskVol3	Number	Best Ask volume 3	
48.	AskPrice4	Number	Best Ask price 4	
49.	AskVol4	Number	Best Ask volume 4	
50.	AskPrice5	Number	Best Ask price 5	
51.	AskVol5	Number	Best Ask volume 5	
52.	AskPrice6	Number	Best Ask price 6	
53.	AskVol6	Number	Best Ask volume 6	
54.	AskPrice7	Number	Best Ask price 7	
55.	AskVol7	Number	Best Ask volume 7	
56.	AskPrice8	Number	Best Ask price 8	
57.	AskVol8	Number	Best Ask volume 8	
58.	AskPrice9	Number	Best Ask price 9	
59.	AskVol9	Number	Best Ask volume 9	
60.	AskPrice10	Number	Best Ask price 10	
61.	AskVol10	Number	Best Ask volume 10	
62.	MarketID			
63.	Exchange			
64.	TradingSession	String	Session status of the market	<p>Having the following value:</p> <ul style="list-style-type: none"> - ATO: Opening Call Auction - LO: Continuous Trading - ATC: Closing Call Auction - PT: Putthrough - C: Market Close - BREAK: Lunch Break - H: Market Halt
65.	TradingStatus	String		<p>Having the following value:</p> <ul style="list-style-type: none"> - N: Normal – Giao dịch bình thường - D: Delisted - Bị hủy niêm yết - H: Halt - Tạm dừng giao dịch giữa phiên - S: Suspend - Ngừng giao dịch - NL: New List - Niêm yết mới - ND: Sắp hủy niêm yết

				- ST: Special Trading - Giao dịch đặc biệt - SA: Suspend A – Bị ngưng giao dịch khớp lệnh - SP: Suspend PT – Ngưng giao dịch khớp lệnh thỏa thuận
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Example:

- Msg Quote data:

```
{ "DataType": "Quote", "Content": "{ { \"RType\": \"Quote\", \"TradingDate\": \"06/04/2021\", \"TradingTime\": \"08:54:52\", \"Exchange\": \"DERIVATIVES\", \"Symbol\": \"VN30F2104\", \"StockNo\": \"1138\", \"AskPrice1\": 0.0, \"AskPrice2\": 1252.0, \"AskPrice3\": 1254.0, \"AskPrice4\": 1257.0, \"AskPrice5\": 1257.5, \"AskPrice6\": 1258.6, \"AskPrice7\": 1259.0, \"AskPrice8\": 1259.4, \"AskPrice9\": 1259.5, \"AskPrice10\": 1259.8, \"AskVol1\": \"140\", \"AskVol2\": \"1\", \"AskVol3\": \"1\", \"AskVol4\": \"6\", \"AskVol5\": \"20\", \"AskVol6\": \"10\", \"AskVol7\": \"8\", \"AskVol8\": \"2\", \"AskVol9\": \"6\", \"AskVol10\": \"2\", \"BidPrice1\": 0.0, \"BidPrice2\": 1344.9, \"BidPrice3\": 1265.0, \"BidPrice4\": 1261.4, \"BidPrice5\": 1260.1, \"BidPrice6\": 1260.0, \"BidPrice7\": 1259.4, \"BidPrice8\": 1258.5, \"BidPrice9\": 1258.0, \"BidPrice10\": 1257.1, \"BidVol1\": \"150\", \"BidVol2\": \"18\", \"BidVol3\": \"1\", \"BidVol4\": \"1\", \"BidVol5\": \"1\", \"BidVol6\": \"33\", \"BidVol7\": \"1\", \"BidVol8\": \"1\", \"BidVol9\": \"10\", \"BidVol10\": \"4\", \"StockType\": \"Future\" } } }
```

- Msg Trade data

```
{ datatype: 'Trade',
```

```
  content:
```

```
{ \"RType\": \"Trade\", \"TradingDate\": \"04/05/2020\", \"Time\": \"14:46:51\", \"ISin\": null, \"Symbol\": \"SSI\", \"Ceiling\": 13900, \"Floor\": 12100, \"RefPrice\": 13000, \"Open\": 12900, \"Close\": 12700, \"High\": 13000, \"Low\": 12700, \"AvgPrice\": 12816, \"PriorVal\": 13000, \"LastPrice\": 12700, \"LastVol\": 2180310, \"TotalVal\": 27943000000, \"TotalVol\": 2180310, \"MarketId\": \"HOSE\", \"Exchange\": \"HOSE\", \"BidPrice1\": 12650, \"BidVol1\": 37330, \"BidPrice2\": 12600, \"BidVol2\": 50770, \"BidPrice3\": 12550, \"BidVol3\": 2720, \"BidPrice4\": 0, \"BidVol4\": 0, \"BidPrice5\": 0, \"BidVol5\": 0, \"BidPrice6\": 0, \"BidVol6\": 0, \"BidPrice7\": 0, \"BidVol7\": 0, \"BidPrice8\": 0, \"BidVol8\": 0, \"BidPrice9\": 0, \"BidVol9\": 0, \"BidPrice10\": 0, \"BidVol10\": 0, \"AskPrice1\": 12700, \"AskVol1\": 51670, \"AskPrice2\": 12750, \"AskVol2\": 18260, \"AskPrice3\": 12800, \"AskVol3\": 47210, \"AskPrice4\": 0, \"AskVol4\": 0, \"AskPrice5\": 0, \"AskVol5\": 0, \"AskPrice6\": 0, \"AskVol6\": 0, \"AskPrice7\": 0, \"AskVol7\": 0, \"AskPrice8\": 0, \"AskVol8\": 0, \"AskPrice9\": 0, \"AskVol9\": 0, \"AskPrice10\": 0, \"AskVol10\": 0, \"TradingSession\": \"ATC\", \"TradingStatus\": \"N\", \"Change\": -300, \"RatioChange\": -2.31, \"EstMatchedPrice\": 0 } }
```

3.3 Foreign Room Data**Input:** R:symbols**Example:** R:SSI or R:SSI-PAN or R:ALL

No.	Name of Element	Type	Description	Valid Value or Format
1.	Rtype	String	Message type	R: Foreign room
2.	TradingDate	Date		
3.	Time	Time		
4.	ISIN	String	ISIN code	
5.	Symbol	String	Local ticker	
6.	TotalRoom	Number	Available no of shares for foreign	

			trading.	
7.	CurrentRoom	Number	Total matched volumes which foreigner brought from market opening till the reporting time.	
8.	FBuyVol	Number	Total matched volumes which foreigner buy from market opening till the reporting time.	
9.	FSellVol		Total matched volumes which foreigner sold from market opening till the reporting time.	
10.	FBuyVal	Number	Total matched buy value of foreign customers	Đối với HOSE, streaming tự tính theo công thức: $\text{BuyVal} = \text{BuyVol} * \text{LastPrice}$ (Giá khớp gần nhất)
11.	FSellVal	Number	Total matched sell value of foreign customers	Đối với HOSE, streaming tự tính theo công thức: $\text{SellVal} = \text{SellVol} * \text{LastPrice}$ (Giá khớp gần nhất)

Example:

{ datatype: 'R',
content:

```
{ "RType": "R", "TradingDate": "04/05/2020", "Time": "15:02:45", "Isin": "YTC", "Symbol": "YTC", "TotalRoom": 0.0, "CurrentRoom": 1475400.0, "BuyVol": 0.0, "SellVol": 0.0, "BuyVal": 0.0, "SellVal": 0.0, "MarketId": "UPCOM", "Exchange": "UPCOM" }
```

3.4 Index Data

Input: MI:VN30 or MI:VN30-HNXindex or MI:ALL

Output:

No	Name of Element	Tyoe	Description	Valid value
1.	Rtype	String	Message Type	MI: Index Information
2.	IndexID	String	Index ID	
3.	IndexValEst	Number	Value of the Estimate Index	
4.	IndexValue	Number	Value of the index	
5.	Trading Date	Date	Trading Date	
6.	Time	Timestamp	Time	
7.	Change	Number	Change of index	
8.	RatioChange	Number	Ratio of Change	
9.	TotalTrade	Number	Tổng số lệnh khớp (cả thông thường và thỏa thuận)	
10.	TotalQty	Number	Tổng matched quantity of normal orders	

11.	TotalValue	Number	Tổng matched value of normal orders	
12.	TypeIndex	String	Index	“Main” – main index such as VN30 “Industry” – industrial related index “Other” – non classified index.
13.	IndexName	String	Name of Index	
14.	Advances	Number	Total number of symbols having price increase	
15.	Nochanges	Number	Total number of symbols having price unchange	
16.	Declines	Number	Total number of symbols having price decrease	
17.	Ceiling	Number	Total number of symbols having last price = ceiling price	
18.	Floor	Number	Total number of symbols having last price = floor price	
19.	TotalQtyPT	Number	Total matched quantity of putthrough orders	
20.	TotalValuePT	Number	Total matched value of putthrough orders	
21.	TotalQtyOd	Number		
22.	TotalValueOd	Number		
23.	AllQty	Number	Total matched quantity of both normal and putthrough	
24.	AllValue	Number	Total matched value of both normal and putthrough	
25.	TradingSession	String	Trading session	- ATO: ATO - LO: Continuous - ATC: ATC - PT: Putthrough - BREAK: lunch break - C: Market Close - H: Market halted
32.	Market	String	Market	- HOSE - HNX
33.	Exchange	String	Exchange	- HOSE - HNX

Example:

```
{'DataType': 'MI',
'Content':
{"IndexId": "VN30", "IndexValEst": 1200.03, "IndexValue": 1238.76, "PriorIndexValue": 1226.16, "TradingDate":
"02/04/2021", "Time": "11:28:13", "TotalTrade": 0.0, "TotalQty": 191838100.0, "TotalValue": 7289093000000.0
```

```
, "IndexName": "VN30", "Advances": 25, "NoChanges": 2, "Declines": 3, "Ceilings": 0, "Floors": 0, "Change": 12.6, "RatioChange": 1.03, "TotalQtyPt": 2064000.0, "TotalValuePt": 244251000000.0, "Exchange": "HOSE", "AllQty": 193902100.0, "AllValue": 7533344000000.0, "IndexType": "Main", "TradingSession": null, "MarketId": null, "RTType": "MI", "TotalQtyOd": 0.0, "TotalValueOd": 0.0 } }
```

3.5 Realtime Bars

Input: B:SSI; B:SSI-VN30 or B:ALL

Output:

No.	Name of Element	Type	Description	Valid Value or Format
1.	Rtype	String	Message Type	b: OHLC information
2.	Time	Timestamp	Include date and time	
3.	Symbol	String	Local ticker	Include both Index, Stock and Derivatives
4.	Open	Number	Open price	
5.	High	Number	Highest price	
6.	Low	Number	Lowest price	
7.	Close	Number	Close price	
8.	Volume	Number	Matched Volume	KL khớp gần nhất
9.	Value	Number	Matched Value	GT khớp gần nhất. Tạm thời để bằng 0

Example:

```
{'Datatype': 'B',
 'Content':
 '{"RTType": "B", "Symbol": "X26", "TradingTime": "14:28:33", "Open": 16000, "High": 16000, "Low": 16000, "Close": 16000, "Volume": 5000, "Value": 0}' }
```

4. Market Data API

I.

4.1 Auth

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/AccessToken>
- Method: POST

Auth Request

No.	Name of Element	Type	Type	Description
Header				
1.	Content-Type	String	Y	application/json
2.	Accept	Number	Y	application/json
Body				
3.	consumerID	string	Y	ConsumerID in the connection information
4.	consumerSecret	string	Y	ConsumerSecret in the connection information

Auth Response

No.	Name of Element	Type	Description	Valid Value or Format
1.	status	String		
2.	message	String		
3.	data	String	accessToken	

Example

Request	Response
<pre>{ "consumerID": "c058f5576181478788 2b2c8df1336e25", "consumerSecret": "144cac45770949519 d2dfd20edb5b6ab", }</pre>	<pre>{ "responseCode": 0, "message": "Success", "token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9"</pre>

Token này sẽ dùng để truyền các api từ 4.2 đến 4.9 với format như sau:

No.	Name of Element	Type	Required	Description	Valid Value or Format
Header					
1.	Authorization	String	Y	Bearer {Token}	
2.	Accept	Number	Y	application/json	

4.2 Securities

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/Securities>
- Method: GET

Securities List Request

No.	Name of Element	Type	Required	Description	Valid Value or Format
3.	Market	String	N	Input market to get securities list belonging to that market	<ul style="list-style-type: none"> - HOSE - HNX - UPCOM - DER If not specify then returns all market
4.	Pageindex	Number	Y		From 1 to 10 Default 1

5.	Pagesize	Number			10; 20; 50; 100; 1000 Default 10
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Securities List Response

No.	Name of Element	Type	Description	Valid Value or Format
4.	Market	String	Stock exchanges	
5.	Symbol	String	Ticker of the securities	
6.	StockName	String	Stock Name in Vietnamese	
7.	StockEnName	String	Stock Name in English	

Example

Request	Response
<pre>{ pageIndex : "1" market: "hose" }</pre>	<pre>{ "data": [{ "Market": "HOSE", "Symbol": "AAA", "StockName": "CTCP NHUA&MT XANH AN PHAT", "StockEnName": "An Phat Bioplastics Joint Stock Company" }, { "Market": "HOSE", "Symbol": "AAM", "StockName": "CTCP THUY SAN MEKONG", "StockEnName": "Mekong Fisheries Joint Stock Company" }], "message": "Success", "status": "Success", "totalRecord": 560 }</pre>

4.3 SecuritiesDetails (GetSecuritiesDetails)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/SecuritiesDetails>
- Method: GET

Securities Details Request

No.	Name of Element	Type	Required	Description	Valid Value or Format
-----	-----------------	------	----------	-------------	-----------------------

1.	Market	String	N		<ul style="list-style-type: none"> - HOSE - HNX - UPCOM - DER If not specify then returns all market
2.	Symbol	String	N		If not specify then returns all market
3.	pageIndex	integer	N		From 1 to 10 Default 1
4.	lookupRequest.pageSize	integer	integer		10; 20; 50; 100; 1000 Default 10

Securities Details Response

No.	Name of Element	Type	Description	Valid Value or Format
1.	RType	String	This is a fixed value to identify the value of this record for equity information.	"y" – Security List
2.	ReportDate	Date	Date & time of the data record.	dd/MM/yyyy HH:mm:ss
3.	TotalNoSym	Number	Total number of symbol returned	
4.	Repeated info			
5.	ISIN	String	ISIN code of the securities	Not used yet
6.	Symbol	String	The local trading code of the equity listed in the exchanges	Equity listed in the exchanges.
7.	SymbolName	String	Name of the securities	
8.	SymbolEngName	String	Name in English	
9.	SecType	String	The type of equity.	<ul style="list-style-type: none"> - ST: Stock - CW: Covered Warrant - FU: Futures - EF: ETF - BO: BOND - OF: OEF - MF: Mutual Fund
10.	MarketID	String	The market of the securities	<ul style="list-style-type: none"> - HOSE - HNX - HNXBOND - UPCOM - DER
11.	Exchange	String	The ID of the corresponding Exchange	- HOSE: Hochiminh Stock Exchange

			where the equity is trading.	- HNX: Hanoi Stock Exchange
12.	Issuer	String	Issuer of the security	
13.	LotSize	Number	Trading lot size of the security	
14.	IssueDate	Date		
15.	MaturityDate	Date		
16.	FirstTradingDate	Date		
17.	LastTradingDate	Date		
18.	ContractMultiplier	Number	Contract Multiplier	
19.	SettlMethod	String	Settlement method of the securities	C: Cash P: Physical
20.	Underlying	String	Underlying securities	
21.	PutOrCall	String	Option Type	- P: Put - C: Call
22.	ExercisePrice	Number	Exercise price. Used for Options, CW	
23.	ExerciseStyle	String	Exercise Style. Used for CW, Options	- E: European - A: American Only available with CoverWarrant
24.	ExcerciseRatio	String	Exercise ratio, used for CW, Options	
25.	ListedShare	Number	Number of listed shares	
26.	TickPrice1	Number	Starting price range 1 for tick rule	
27.	TickIncrement1	Number	Tick increasement for price range 1 for tick rule	
28.	TickPrice2	Number	Starting price range 2 for tick rule	
29.	TickIncrement2	Number	Tick increasement for price range 2	
30.	TickPrice3	Number	Starting price range 3 for tick rule	
31.	TickIncrement3	Number	Tick increasement for price range 3	
32.	TickPrice4	Number	Starting price range 4 for tick rule	
33.	TickIncrement4	Number	Tick increasement for price range 4	

Example

Request	Response
Symbol: SSI	<pre>{ "dataList": [{ "rtype": "y", "reportdate": "04/05/2020",</pre>

	<pre> "totalnosym": "1", "repeatedinfoList": [{ "isin": "", "symbol": "SSI", "symbolname": "Công ty Cổ phần Chứng khoán SSI", "symbolengname": "SSI Securities Corporation", "sectype": "ST", "marketid": "HOSE", "exchange": "HOSE", "issuer": "Công ty Cổ phần Chứng khoán SSI", "lotsize": "10", "issuedate": "", "maturitydate": "", "firsttradingdate": "", "lasttradingdate": "", "contractmultiplier": "0", "settlmethod": "C", "underlying": "", "putorcall": "", "exerciseprice": "0", "exercisestyle": "", "exerciseratio": "0", "listedshare": "602952421", "tickprice1": "1", "tickincrement1": "10", "tickprice2": "10000", "tickincrement2": "50", "tickprice3": "50000", "tickincrement3": "100", "tickprice4": "", "tickincrement4": "" }] }, "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 1, "securitiesdetailsresponse": { } } </pre>
--	--

4.4 Index Component (GetIndexComponents)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/IndexComponents>
- Method: GET

Index Component Request

No	Name of Element	Type	Mandatory	Description	Valid Value
----	-----------------	------	-----------	-------------	-------------

1.	Indexcode	String	Y	Input Index Code to get consituent stocks	
2.	PageIndex	Number	Y		From 1 to 10 Default 1
3.	PageSize	Number	Y		10; 20; 50; 100; 500; 1000 Default 10

Index Component Response

No	Name of Element	Type	Description	Valid Value
1.	IndexCode	String	Index Code	
2.	IndexName	String		
3.	Exchange	String	Exchange of the Index	
4.	TotalSymbolNo	Number	Total number of symbols in the Index	
List of stocks with the following information				
5.	ISIN	String	ISIN Code of the security	
6.	StockSymbol	String	Ticker code of the security	

Example

Request	Response
Indexcode: VN30	<pre> { "dataList": [{ "indexcode": "VN30", "indexname": "VN30", "exchange": "HOSE", "totalsymbolno": "30", "indexcomponentList": [{ "isin": "BID", "stocksymbol": "BID" }, ... { "isin": "BVH", "stocksymbol": "BVH" }] }], "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 30, "indexcomponentresponse": { } } </pre>

4.5 Index List (GetIndexList)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/IndexList>
- Method: GET

Index List Request

No	Name of Element	Type	Mandatory	Description	Valid Value
1.	Exchange	string	N	Input Exchange code to get the list of indexes for that Exchange	<ul style="list-style-type: none"> - HOSE: HCM Exchange - HNX: Hanoi Exchange If not specify then returns all exchanges
2.	PageIndex	Number	N		From 1 to 10 Default 1
3.	PageSize	Number	N		10; 20; 50; 100; 500; 1000 Default 10

Index List Response

No	Name of Element	Type	Description	Valid Value
Returns list of indexes with the following fields				
1.	Indexcode	String	Index Code	
2.	Indexname	String	Index Name	
3.	Exchange	String	Exchange of the Index	

Example

Request	Response
Exchange: HNX	<pre>{ "dataList": [{ "indexcode": "HNX30", "indexname": "HNX30", "exchange": "HNX" }, { "indexcode": "HNXIndex", "indexname": "HNXIndex", "exchange": "HNX" }, { "indexcode": "HNXUpcomIndex", "indexname": "HNXUpcomIndex", "exchange": "HNX" }], "message": "SUCCESS", }</pre>

	<pre>"status": "SUCCESS", "totalrecord": 3, "indexlistresponse": { } }</pre>
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4.6 Daily OHLC (GetDailyOHLC)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/DailyOhlc>
- Method: GET

GetDailyOHLC Request

No	Name of Element	Type	Mandatory	Description	Valid Value
1.	Symbol	String	N	Symbol of stock, indexcode, derivatives	
2.	FromDate	Date	Y		If not specify, get today date
3.	ToDate	Date	Y		If not specify, get today date. Max range 30 days
4.	PageIndex	Number	N		From 1 to 10 Default 1
5.	PageSize	Number	N		10; 20; 50; 100; 500; 1000 Default 10
6.	ascending	boolean	Yes	true/ false	

GetDailyOHLC Response

No	Name of Element	Type	Description	Valid value
1.	Symbol	String	Index ID/Stock Symbol	
2.	Market	String	Market of the symbol	
3.	Trading Date	Date	Trading Date	
4.	Time	Timestamp	Time	
5.	Open	Number		
6.	High	Number		
7.	Low	Number		
8.	Close	Number		
9.	Volume	Number	Total normal matched volume	
10.	Value	Number	Total normal matched value	

Example

Request	Response
Symbol: SSI Fromdate: 04/05/2020 Todate: 04/05/2020	<pre> "dataList": [{ "symbol": "SSI", "market": "HOSE", "tradingdate": "04/05/2020", "time": "", "open": "12900", "high": "13000", "low": "12700", "close": "12700", "volume": "2180310", "value": "27943000000" }], "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 1, "dailyohlcreponse": { } } </pre>

4.7 Intraday OHLC (GetIntradayOHLC)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/IntradayOhlc>
- Method: GET

GetIntradayOHLC Request

No	Name of Element	Type	Mandatory	Description	Valid Value
1.	Symbol	String	Y	Input Index ID or Instrument Symbol to get data. Including Stock, Derivatives, CW	
2.	FromDate	Date	N		If not specify, get today date
3.	ToDate	Date	N		If not specify, get today date
4.	PageIndex	Number	N		From 1 to 10 Default 1
5.	PageSize	Number	N		10; 20; 50; 100; 500; 1000 Default 10
6.	resolution	integer	N		Group data by 1m

7.	ascending	boolean	N		
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GetIntradayOHLC Response

No	Name of Element	Type	Description	Valid value
1.	Symbol	String	Index ID/Stock Symbol	
2.	Open	Number	Value of the index	
3.	Trading Date	Date	Trading Date	
4.	Time	Timestamp	Time	
5.	Open	Number		
6.	High	Number		
7.	Low	Number		
8.	Close	Number		
9.	Volume	Number		
10.	Value	Number		

Example

Request	Response
Symbol: SSI Fromdate: 04/05/2020 Todate: 04/05/2020	<pre>{ "dataList": [{ "symbol": "SSI", "value": "12900", "tradingdate": "04/05/2020", "time": "09:15:44", "open": "12900", "high": "12900", "low": "12900", "close": "12900", "volume": "25240" }, { "symbol": "SSI", "value": "12900", "tradingdate": "04/05/2020", "time": "09:16:55", "open": "12900", "high": "12900", "low": "12900", "close": "12900", "volume": "6650" }], "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 200, "intradayohlcreponse": { </pre>

	}
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4.8 Daily Index (GetDailyIndex)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/DailyIndex>
- Method: GET

GetDailyIndex Request

No	Name of Element	Type	Mandatory	Description	Valid value
1.	Indexcode	String	Y	Index ID	Valid values can be queried by api getIndexList
2.	FromDate	Number	N	Value of the index	If not specify get today date
3.	ToDate	Date	N		If not specify, get today date
4.	PageIndex	Number	N		From 1 to 10 Default 1
5.	PageSize	Number	N		10; 20; 50; 100; 500; 1000 Default 10
6.	OrderBy	String	N		Default Tradingdate
7.	Order	String	N		Default desc

GetDailyIndex Response

No	Name of Element	Type	Description	Valid value
1.	Indexcode	String	Index ID	
2.	IndexValue	Number	Value of the index	
3.	Trading Date	Date	Trading Date	
4.	Time	Timestamp	Time	
5.	Change	Number	Change of index	
6.	RatioChange	Number	Ratio of Change	
7.	TotalTrade	Number	Tổng số lệnh khớp (cả thông thường và thỏa thuận)	
8.	Totalmatchvol	Number	Tổng matched quantity of normal orders	
9.	Totalmatchval	Number	Tổng matched value of normal orders	
10.	TypeIndex		Type of index	
11.	IndexName	String	Name of Index	
12.	Advances	Number	Total number of symbols having price increase	
13.	Nochanges	Number	Total number of symbols having price unchange	

14.	Declines	Number	Total number of symbols having price decrease	
15.	Ceiling	Number	Total number of symbols having last price = ceiling price	
16.	Floor	Number	Total number of symbols having last price = floor price	
17.	Totaldealvol	Number	Total matched quantity of putthrough orders	
18.	Totaldealval	Number	Total matched value of putthrough orders	
19.	Totalvol	Number	Total matched quantity of both normal and putthrough	
20.	Totalval	Number	Total matched value of both normal and putthrough	
21.	TradingSession	String	Trading session	<ul style="list-style-type: none"> - ATO: ATO - LO: Continuous - ATC: ATC - PT: Putthrough - BREAK: lunch break - C: Market Close - H: Market halted
28.	Market	String	Market	<ul style="list-style-type: none"> - HOSE - HNX - UPCOM - DER - BOND
29.	Exchange	String	Exchange	<ul style="list-style-type: none"> - HOSE - HNX

Example

Request	Response
Indexid: HNXIndex Fromdate: 04/05/2020 Todate: 04/05/2020	<pre>{ "dataList": [{ "indexid": "HNXIndex", "indexvalue": "105.72", "tradingdate": "04/05/2020", "time": "", "change": "-0.0112", "ratiochange": "-1.05", "totaltrade": "0", "totalmatchvol": "40342400", "totalmatchval": "295811440000", "typeindex": "Main", "indexname": "HNXIndex", "advances": "59", "nochanges": "56", "declines": "92", </pre>

	<pre> "ceilings": "15", "floors": "18", "totaldealvol": "1236772", "totaldealval": "20217698200", "totalvol": "41579172", "totalval": "316029138200", "tradingession": "C" }], "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 1, "dailyindexresponse": { } } </pre>
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4.9 Daily Stock Price (GetStockPrice)

- Url: <https://fc-data.ssi.com.vn/api/v2/Market/DailyStockPrice>
- Method: GET

GetStockPrice Request

No	Name of Element	Type	Required	Description	Valid value
1.	Symbol	String	N	Symbol of the security	Include Stock, CW and Derivatives
2.	FromDate	String	Y		DD/MM/YYYY
3.	ToDate	String	Y		DD/MM/YYYY
4.	PageIndex	String	N	Number of page	Start from 1, default 1
5.	PageSize	String	N	Size of a page	10; 20; 50; 100 Default 10
6.	Market	String	N	Identify what market for this symbol	<ul style="list-style-type: none"> - HOSE - HNX - UPCOM - DER - BOND

GetStockPrice Response

No.	Field	Type	Description	Valid Value/Format
1.	Tradingdate	string	Trading date	
2.	Symbol	string		
3.	Pricechange	string	Price change	
4.	Perpricechange	string	Per price change	
5.	Ceilingprice	string	Ceilingprice	
6.	Floorprice	string	Floorprice	
7.	Refprice	string	Reference Price	

8.	Openprice	string	Open price	
9.	Highestprice	string	Highest price	
10.	Lowestprice	string	Lowest price	
11.	Closeprice	string	Closeprice	
12.	Averageprice	string	averageprice	
13.	Closepriceadjusted	string	Closepriceadjusted	
14.	Totalmatchvol	string	Total match volume	
15.	Totalmatchval	string	Total match value	
16.	Totaldealval	string	Total deal value	
17.	Totaldealvol	string	Total deal volume	
18.	Foreignbuyvtotal	string	Total foreign buy volume	
19.	Foreigncurrentroom			
20.	Foreignsellvtotal	string	Total foreign sell volume	
21.	Foreignbuyvtotal	string	Total foreign buy volume	
22.	Toreignsellvtotal	string	Total foreign sell value	
23.	Totalbuytrade	string	Total buy trade	
24.	Totalbuytradevol	string	Total buy trade volume	
25.	Totalselltrade	string	Total sell trade	
26.	Totalselltradevol	string	Total sell trade volume	
27.	Netforeivol	string	Net volume after netoff from foreign Sell volume to Foreign Buy volume	
28.	Netforeignval	String	Net value after netoff from Sell value to Foreign Buy value	
29.	Totaltradedvol	String	Total traded vol includes: matched, put and odd	
30.	Totaltradedvalue	String	Total traded value includes: matched, put and odd	

Example

Request	Response
Symbol: SSI Fromdate: 04/05/2020 Todate: 04/05/2020	<pre> "dataList": [{ "tradingdate": "04/05/2020", "pricechange": "-300", "perpricechange": "-2.30", "ceilingprice": "13900", "floorprice": "12100", "refprice": "13000", "openprice": "12900", "highestprice": "13000", "lowestprice": "12700", "closeprice": "12700", "averageprice": "12816", "closepriceadjusted": "12700", "totalmatchvol": "2180310", "totalmatchval": "27943000000", "totaldealval": "0", "totaldealvol": "0", "foreignbuyvtotal": "25310", </pre>

	<pre>"foreigncurrentroom": "253974102", "foreignsellvtotal": "1117250", "foreignbuyvtotal": "322702500", "foreignsellvtotal": "14244937500", "totalbuytrade": "0", "totalbuytradevol": "0", "totalselltrade": "0", "totalselltradevol": "0", "netbuysellvol": "-1091940", "netbuysellval": "-13922235000", "totaltradedvol": "2180310", "totaltradedvalue": "27943000000", "symbol": "SSI", "time": "" }], "message": "SUCCESS", "status": "SUCCESS", "totalrecord": 1, "stockpricerresponse": { } }</pre>
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