Alpha Vantage API Documentation

alphavantage.co/documentation/

Alpha Vantage APIs are grouped into four categories: (1) Time Series Stock APIs, (2) Fundamental Data, (3) Physical and Digital/Crypto Currencies (e.g., Bitcoin), and (4) Technical Indicators. Examples in this documentation are for demo purposes. Claim your free API key today to explore our full API offerings!

Time Series Stock APIs

This suite of APIs provide global equity data in 4 different temporal resolutions: (1) daily, (2) weekly, (3) monthly, and (4) intraday. Daily, weekly, and monthly time series contain 20+ years of historical data.

TIME_SERIES_INTRADAY High Usage

This API returns intraday time series of the equity specified, covering extended trading hours where applicable (e.g., 4:00am to 8:00pm Eastern Time for the US market). The intraday data is computed directly from the Securities Information Processor (SIP) market-aggregated data feed. You can query both raw (as-traded) and split/dividend-adjusted intraday data from this endpoint.

This API returns the most recent 1-2 months of intraday data and is best suited for short-term/medium-term charting and trading strategy development. If you are targeting a deeper intraday history, please use the Extended Intraday API.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_INTRADAY`

▌**Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`

❚ Optional: `adjusted`

By default, `adjusted=true` and the output time series is adjusted by historical split and dividend events. Set `adjusted=false` to query raw (as-traded) intraday values.

❚ Optional: `outputsize`

By default, `outputsize=compact`. Strings `compact` and `full` are accepted with the following specifications: `compact` returns only the latest 100 data points in the intraday time series; `full` returns the full-length intraday time series. The "compact" option is recommended if you would like to reduce the data size of each API call.

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the intraday time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

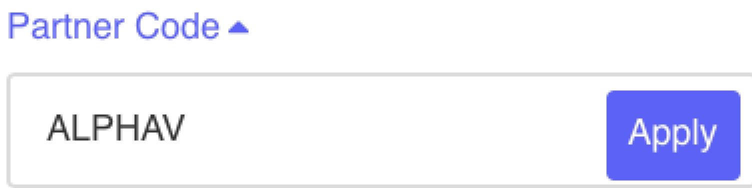
https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY&**symbol**=IBM&**interval**=5min&**apikey**=demo

https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY&**symbol**=IBM&**interval**=5min&**outputsize**=full&**apikey**=demo

Downloadable CSV file:
https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY&**symbol**=IBM&**interval**=5min&**apikey**=demo&**datatype**=csv

If you are interested in realtime intraday data for US stocks and ETFs, we have partnered with Polygon.io, a leading provider of realtime market data that counts Google and Robinhood as its customers. Specifically, this Intraday Time Series API maps directly to Polygon's Aggregates API.

Alpha Vantage users will enjoy a **lifetime 10% discount** for their Polygon subscriptions. To unlock the discount, simply sign up for Polygon using your **Alpha Vantage user email** and enter the code **ALPHAV** on the subscription page.



Intraday (Extended History)

This API returns historical intraday time series for the trailing 2 years, covering over 2 million data points per ticker. The intraday data is computed directly from the Securities Information Processor (SIP) market-aggregated data feed. You can query both raw (as-traded) and split/dividend-adjusted intraday data from this endpoint. Common use cases for this API include data visualization, trading simulation/backtesting, and machine learning and deep learning applications with a longer horizon.

API Parameters

❚ **Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_INTRADAY_EXTENDED`

❚ **Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`

❚ **Required:** `slice`

Two years of minute-level intraday data contains over 2 million data points, which can take up to Gigabytes of memory. To ensure optimal API response speed, the trailing 2 years of intraday data is evenly divided into 24 "slices" - `year1month1`, `year1month2`, `year1month3`, ..., `year1month11`, `year1month12`, `year2month1`, `year2month2`, `year2month3`, ..., `year2month11`, `year2month12`. Each slice is a 30-day window, with `year1month1` being the most recent and `year2month12` being the farthest from today. By default, `slice=year1month1`.

▌Optional: `adjusted`

By default, `adjusted=true` and the output time series is adjusted by historical split and dividend events. Set `adjusted=false` to query raw (as-traded) intraday values.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples

To ensure optimal API response time, this endpoint uses the CSV format which is more memory-efficient than JSON.

Split/dividend-adjusted 15min intraday data for IBM covering the most recent 30 days (slice=year1month1):
https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY_EXTENDED&**symbol**=IBM&**interval**=15min&**slice**=year1month1&**apikey**=demo

Split/dividend-adjusted 15min intraday data for IBM covering the most recent day 31 through day 60 (slice=year1month2):
https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY_EXTENDED&**symbol**=IBM&**interval**=15min&**slice**=year1month2&**apikey**=demo

Raw (as-traded) 60min intraday data for IBM covering the most recent day 61 through day 90 (slice=year1month3):
https://www.alphavantage.co/query?**function**=TIME_SERIES_INTRADAY_EXTENDED&**symbol**=IBM&**interval**=60min&**slice**=year1month3&**adjusted**=false&**apikey**=demo

TIME_SERIES_DAILY

This API returns raw (as-traded) daily time series (date, daily open, daily high, daily low, daily close, daily volume) of the global equity specified, covering 20+ years of historical data. If you are also interested in split/dividend-adjusted historical data, please use the Daily Adjusted API, which covers adjusted close values and historical split and dividend events.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_DAILY`

▌**Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌Optional: `outputsize`

By default, `outputsize=compact`. Strings `compact` and `full` are accepted with the following specifications: `compact` returns only the latest 100 data points; `full` returns the full-length time series of 20+ years of historical data. The "compact" option is recommended if you would like to reduce the data size of each API call.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=TIME_SERIES_DAILY&symbol=IBM&apikey=demo

https://www.alphavantage.co/query?function=TIME_SERIES_DAILY&symbol=IBM&outputsize=full&apikey=demo

https://www.alphavantage.co/query?function=TIME_SERIES_DAILY&symbol=TSCO.LON&outputsize=full&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=TIME_SERIES_DAILY&symbol=IBM&apikey=demo&datatype=csv

TIME_SERIES_DAILY_ADJUSTED High Usage

This API returns raw (as-traded) daily open/high/low/close/volume values, daily adjusted close values, and historical split/dividend events of the global equity specified, covering 20+ years of historical data.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_DAILY_ADJUSTED`

▌ **Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌ Optional: `outputsize`

By default, `outputsize=compact`. Strings `compact` and `full` are accepted with the following specifications: `compact` returns only the latest 100 data points; `full` returns the full-length time series of 20+ years of historical data. The "compact" option is recommended if you would like to reduce the data size of each API call.

▌ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=TIME_SERIES_DAILY_ADJUSTED&**symbol**=IBM&**apikey**=demo

https://www.alphavantage.co/query?**function**=TIME_SERIES_DAILY_ADJUSTED&**symbol**=IBM&**outputsize**=full&**apikey**=demo

https://www.alphavantage.co/query?**function**=TIME_SERIES_DAILY_ADJUSTED&**symbol**=TSCO.LON&**outputsize**=full&**apikey**=demo

Downloadable CSV file:
https://www.alphavantage.co/query?**function**=TIME_SERIES_DAILY_ADJUSTED&**symbol**=IBM&**apikey**=demo&**datatype**=csv

TIME_SERIES_WEEKLY

This API returns weekly time series (last trading day of each week, weekly open, weekly high, weekly low, weekly close, weekly volume) of the global equity specified, covering 20+ years of historical data.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_WEEKLY`

▌**Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the weekly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY&symbol=IBM&apikey=demo

https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY&symbol=TSCO.LON&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY&symbol=IBM&apikey=demo&datatype=csv

TIME_SERIES_WEEKLY_ADJUSTED

This API returns weekly adjusted time series (last trading day of each week, weekly open, weekly high, weekly low, weekly close, weekly adjusted close, weekly volume, weekly dividend) of the global equity specified, covering 20+ years of historical data.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_WEEKLY_ADJUSTED`

▌**Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the weekly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required: `apikey`**

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY_ADJUSTED&symbol=IBM&apikey=demo

https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY_ADJUSTED&symbol=TSCO.LON&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=TIME_SERIES_WEEKLY_ADJUSTED&symbol=IBM&apikey=demo&datatype=csv

TIME_SERIES_MONTHLY

This API returns monthly time series (last trading day of each month, monthly open, monthly high, monthly low, monthly close, monthly volume) of the global equity specified, covering 20+ years of historical data.

API Parameters

▌**Required: `function`**

The time series of your choice. In this case, `function=TIME_SERIES_MONTHLY`

▌**Required: `symbol`**

The name of the equity of your choice. For example: `symbol=IBM`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the monthly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY&**symbol**=IBM&**apikey**=demo

https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY&**symbol**=TSCO.LON&**apikey**=demo

Downloadable CSV file:
https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY&**symbol**=IBM&**apikey**=demo&**datatype**=csv

TIME_SERIES_MONTHLY_ADJUSTED

This API returns monthly adjusted time series (last trading day of each month, monthly open, monthly high, monthly low, monthly close, monthly adjusted close, monthly volume, monthly dividend) of the equity specified, covering 20+ years of historical data.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=TIME_SERIES_MONTHLY_ADJUSTED`

▌**Required:** `symbol`

The name of the equity of your choice. For example: `symbol=IBM`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the monthly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

[https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY_ADJUSTED&**symbol**=IBM&**apikey**=demo](https://www.alphavantage.co/query?function=TIME_SERIES_MONTHLY_ADJUSTED&symbol=IBM&apikey=demo)

[https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY_ADJUSTED&**symbol**=TSCO.LON&**apikey**=demo](https://www.alphavantage.co/query?function=TIME_SERIES_MONTHLY_ADJUSTED&symbol=TSCO.LON&apikey=demo)

Downloadable CSV file:
[https://www.alphavantage.co/query?**function**=TIME_SERIES_MONTHLY_ADJUSTED&**symbol**=IBM&**apikey**=demo&**datatype**=csv](https://www.alphavantage.co/query?function=TIME_SERIES_MONTHLY_ADJUSTED&symbol=IBM&apikey=demo&datatype=csv)

Quote Endpoint High Usage

A lightweight alternative to the time series APIs, this service returns the price and volume information for a security of your choice.

API Parameters

❚ **Required:** `function`

The API function of your choice.

❚ **Required:** `symbol`

The symbol of the global security of your choice. For example: `symbol=IBM`.

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the quote data in JSON format; `csv` returns the quote data as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

[https://www.alphavantage.co/query?**function**=GLOBAL_QUOTE&**symbol**=IBM&**apikey**=demo](https://www.alphavantage.co/query?function=GLOBAL_QUOTE&symbol=IBM&apikey=demo)

[https://www.alphavantage.co/query?**function**=GLOBAL_QUOTE&**symbol**=300135.SHZ&**apikey**=demo](https://www.alphavantage.co/query?function=GLOBAL_QUOTE&symbol=300135.SHZ&apikey=demo)

Downloadable CSV file:

https://www.alphavantage.co/query?
function=GLOBAL_QUOTE&**symbol**=IBM&**apikey**=demo&**datatype**=csv

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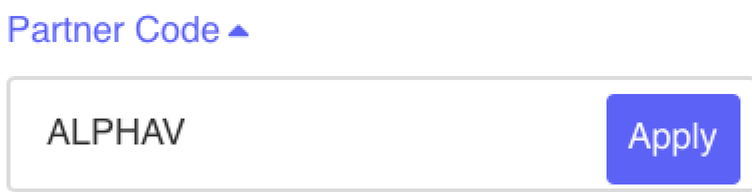
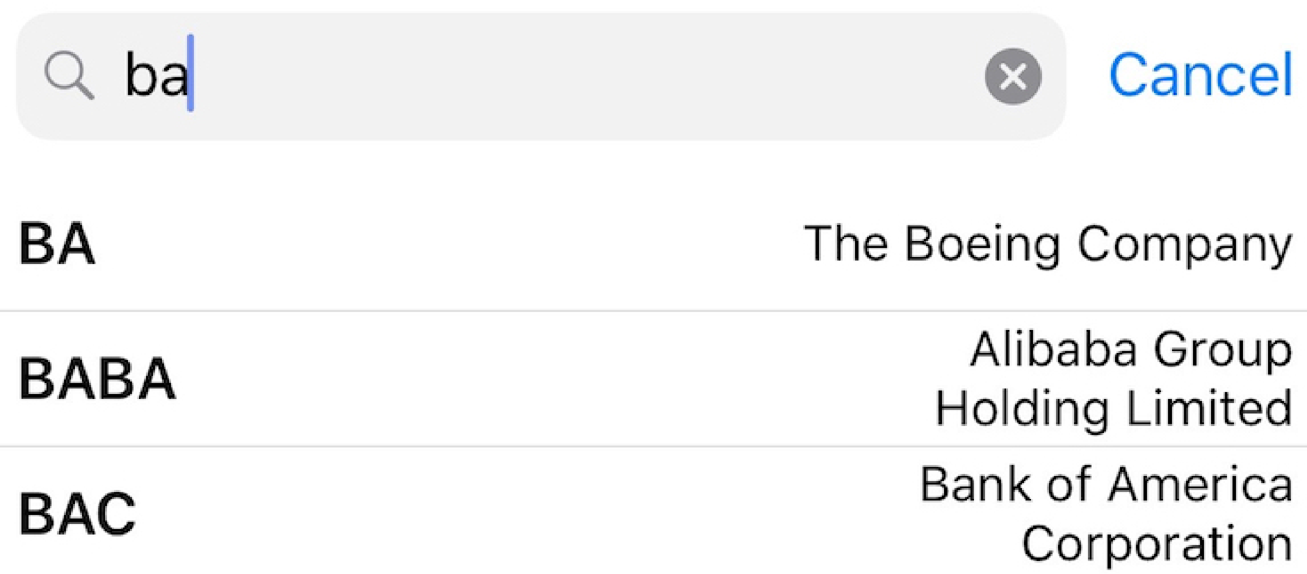


Search Endpoint

Looking for some specific symbols or companies? Trying to build an auto-complete search box similar to the one below?



We've got you covered! The Search Endpoint returns the best-matching symbols and market information based on keywords of your choice. The search results also contain match scores that provide you with the full flexibility to develop your own search and filtering logic.

API Parameters

▌**Required:** `function`

The API function of your choice. In this case, `function=SYMBOL_SEARCH`

▌**Required:** `keywords`

A text string of your choice. For example: `keywords=microsoft`.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the search results in JSON format; `csv` returns the search results as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=SYMBOL_SEARCH&keywords=tesco&apikey=demo

https://www.alphavantage.co/query?function=SYMBOL_SEARCH&keywords=tencent&apikey=demo

https://www.alphavantage.co/query?function=SYMBOL_SEARCH&keywords=BA&apikey=demo

https://www.alphavantage.co/query?function=SYMBOL_SEARCH&keywords=SAIC&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=SYMBOL_SEARCH&keywords=BA&apikey=demo&datatype=csv

Fundamental Data

We offer the following set of fundamental data APIs in various temporal dimensions covering key financial metrics, income statements, balance sheets, cash flow, and other fundamental data points.

Company Overview High Usage

This API returns the company information, financial ratios, and other key metrics for the equity specified. Data is generally refreshed on the same day a company reports its latest earnings and financials.

API Parameters

▌**Required:** `function`

The function of your choice. In this case, `function=OVERVIEW`

▌**Required:** `symbol`

The symbol of the security of your choice. For example: `symbol=IBM`.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=OVERVIEW&**symbol**=IBM&**apikey**=demo

INCOME_STATEMENT

This API returns the annual and quarterly income statements for the company of interest. Data is generally refreshed on the same day a company reports its latest earnings and financials.

API Parameters

▌**Required:** `function`

The function of your choice. In this case, `function=INCOME_STATEMENT`

▌**Required:** `symbol`

The symbol of the security of your choice. For example: `symbol=IBM`.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

[https://www.alphavantage.co/query?**function**=INCOME_STATEMENT&**symbol**=IBM&**apikey**=demo](https://www.alphavantage.co/query?function=INCOME_STATEMENT&symbol=IBM&apikey=demo)

BALANCE_SHEET

This API returns the annual and quarterly balance sheets for the company of interest. Data is generally refreshed on the same day a company reports its latest earnings and financials.

API Parameters

❚ Required: `function`

The function of your choice. In this case, `function=BALANCE_SHEET`

❚ Required: `symbol`

The symbol of the security of your choice. For example: `symbol=IBM`.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

[https://www.alphavantage.co/query?**function**=BALANCE_SHEET&**symbol**=IBM&**apikey**=demo](https://www.alphavantage.co/query?function=BALANCE_SHEET&symbol=IBM&apikey=demo)

CASH_FLOW

This API returns the annual and quarterly cash flows for the company of interest. Data is generally refreshed on the same day a company reports its latest earnings and financials.

API Parameters

❚ Required: `function`

The function of your choice. In this case, `function=CASH_FLOW`

❚ Required: `symbol`

The symbol of the security of your choice. For example: `symbol=IBM`.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=CASH_FLOW&**symbol**=IBM&**apikey**=demo

Earnings

This API returns the annual and quarterly earnings (EPS) for the company of interest. Quarterly data also includes analyst estimates and surprise metrics.

API Parameters

❚ **Required:** `function`

The function of your choice. In this case, `function=EARNINGS`

❚ **Required:** `symbol`

The symbol of the security of your choice. For example: `symbol=IBM`.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=EARNINGS&**symbol**=IBM&**apikey**=demo

Listing & Delisting Status

This API returns a list of active or delisted US stocks and ETFs, either as of the latest trading day or at a specific time in history. The endpoint is positioned to facilitate equity research on asset lifecycle and survivorship.

API Parameters

❚ **Required:** `function`

The API function of your choice. In this case, `function=LISTING_STATUS`

❚ Optional: `date`

If no date is set, the API endpoint will return a list of active or delisted symbols as of the latest trading day. If a date is set, the API endpoint will "travel back" in time and return a list of active or delisted symbols on that particular date in history. Any YYYY-MM-DD date later than 2010-01-01 is supported. For example, `date=2013-08-03`

▌Optional: `state`

By default, `state=active` and the API will return a list of actively traded stocks and ETFs. Set `state=delisted` to query a list of delisted assets.

▌**Required: `apikey`**

Your API key. Claim your free API key here.

Examples

To ensure optimal API response time, this endpoint uses the CSV format which is more memory-efficient than JSON.

Querying all active stocks and ETFs as of the latest trading day:
`https://www.alphavantage.co/query?function=LISTING_STATUS&apikey=demo`

Querying all delisted stocks and ETFs as of 2014-07-10:
`https://www.alphavantage.co/query?function=LISTING_STATUS&date=2014-07-10&state=delisted&apikey=demo`

Earnings Calendar

This API returns a list of company earnings expected in the next 3, 6, or 12 months.

API Parameters

▌**Required: `function`**

The API function of your choice. In this case, `function=EARNINGS_CALENDAR`

▌Optional: `symbol`

By default, no symbol will be set for this API. When no symbol is set, the API endpoint will return the full list of company earnings scheduled. If a symbol is set, the API endpoint will return the expected earnings for that specific symbol. For example, `symbol=IBM`

▌Optional: `horizon`

By default, `horizon=3month` and the API will return a list of expected company earnings in the next 3 months. You may set `horizon=6month` or `horizon=12month` to query the earnings scheduled for the next 6 months or 12 months, respectively.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples

To ensure optimal API response time, this endpoint uses the CSV format which is more memory-efficient than JSON.

Querying all the company earnings expected in the next 3 months:
https://www.alphavantage.co/query?**function**=EARNINGS_CALENDAR&**horizon**=3month&**apikey**=demo

Querying all the earnings events for IBM in the next 12 months:
https://www.alphavantage.co/query?**function**=EARNINGS_CALENDAR&**symbol**=IBM&**horizon**=12month&**apikey**=demo

IPO Calendar

This API returns a list of IPOs expected in the next 3 months.

API Parameters

❚ **Required:** `function`

The API function of your choice. In this case, `function=IPO_CALENDAR`

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples

To ensure optimal API response time, this endpoint uses the CSV format which is more memory-efficient than JSON.

Querying all the company earnings expected in the next 3 months:
https://www.alphavantage.co/query?**function**=IPO_CALENDAR&**apikey**=demo

Foreign Exchange (FX)

APIs under this section provide a wide range of data feed for realtime and historical forex (FX) rates.

CURRENCY_EXCHANGE_RATE High Usage

This API returns the realtime exchange rate for a pair of digital currency (e.g., Bitcoin) and physical currency (e.g., USD).

API Parameters

▌**Required:** `function`

The function of your choice. In this case, `function=CURRENCY_EXCHANGE_RATE`

▌**Required:** `from_currency`

The currency you would like to get the exchange rate for. It can either be a physical currency or digital/crypto currency. For example: `from_currency=USD` or `from_currency=BTC` .

▌**Required:** `to_currency`

The destination currency for the exchange rate. It can either be a physical currency or digital/crypto currency. For example: `to_currency=USD` or `to_currency=BTC` .

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

US Dollar to Japanese Yen:
`https://www.alphavantage.co/query?function=CURRENCY_EXCHANGE_RATE&from_currency=USD&to_currency=JPY&apikey=demo`

Bitcoin to Chinese Yuan:
`https://www.alphavantage.co/query?function=CURRENCY_EXCHANGE_RATE&from_currency=BTC&to_currency=CNY&apikey=demo`

FX_INTRADAY High Usage

This API returns intraday time series (timestamp, open, high, low, close) of the FX currency pair specified, updated realtime.

API Parameters

❚ **Required:** `function`

The time series of your choice. In this case, `function=FX_INTRADAY`

❚ **Required:** `from_symbol`

A three-letter symbol from the forex currency list. For example: `from_symbol=EUR`

❚ **Required:** `to_symbol`

A three-letter symbol from the forex currency list. For example: `to_symbol=USD`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`

❚ Optional: `outputsize`

By default, `outputsize=compact`. Strings `compact` and `full` are accepted with the following specifications: `compact` returns only the latest 100 data points in the intraday time series; `full` returns the full-length intraday time series. The "compact" option is recommended if you would like to reduce the data size of each API call.

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the intraday time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=FX_INTRADAY&**from_symbol**=EUR&**to_symbol**=USD&**interval**=5min&**apikey**=demo

https://www.alphavantage.co/query?function=FX_INTRADAY&from_symbol=EUR&to_symbol=USD&interval=5min&outputsize=full&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=FX_INTRADAY&from_symbol=EUR&to_symbol=USD&interval=5min&apikey=demo&datatype=csv

FX_DAILY

This API returns the daily time series (timestamp, open, high, low, close) of the FX currency pair specified, updated realtime.

API Parameters

❚ Required: `function`

The time series of your choice. In this case, `function=FX_DAILY`

❚ Required: `from_symbol`

A three-letter symbol from the forex currency list. For example: `from_symbol=EUR`

❚ Required: `to_symbol`

A three-letter symbol from the forex currency list. For example: `to_symbol=USD`

❚ Optional: `outputsize`

By default, `outputsize=compact`. Strings `compact` and `full` are accepted with the following specifications: `compact` returns only the latest 100 data points in the daily time series; `full` returns the full-length daily time series. The "compact" option is recommended if you would like to reduce the data size of each API call.

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=FX_DAILY&**from_symbol**=EUR&**to_symbol**=USD&**apikey**=demo

https://www.alphavantage.co/query?**function**=FX_DAILY&**from_symbol**=EUR&**to_symbol**=USD&**outputsize**=full&**apikey**=demo

Downloadable CSV file:
https://www.alphavantage.co/query?**function**=FX_DAILY&**from_symbol**=EUR&**to_symbol**=USD&**apikey**=demo&**datatype**=csv

FX_WEEKLY

This API returns the weekly time series (timestamp, open, high, low, close) of the FX currency pair specified, updated realtime.

The latest data point is the price information for the week (or partial week) containing the current trading day, updated realtime.

API Parameters

❚ **Required:** `function`

The time series of your choice. In this case, `function=FX_WEEKLY`

❚ **Required:** `from_symbol`

A three-letter symbol from the forex currency list. For example: `from_symbol=EUR`

❚ **Required:** `to_symbol`

A three-letter symbol from the forex currency list. For example: `to_symbol=USD`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the weekly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=FX_WEEKLY&from_symbol=EUR&to_symbol=USD&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=FX_WEEKLY&from_symbol=EUR&to_symbol=USD&apikey=demo&datatype=csv

FX_MONTHLY

This API returns the monthly time series (timestamp, open, high, low, close) of the FX currency pair specified, updated realtime.

The latest data point is the prices information for the month (or partial month) containing the current trading day, updated realtime.

API Parameters

❚ **Required:** `function`

The time series of your choice. In this case, `function=FX_MONTHLY`

❚ **Required:** `from_symbol`

A three-letter symbol from the forex currency list. For example: `from_symbol=EUR`

❚ **Required:** `to_symbol`

A three-letter symbol from the forex currency list. For example: `to_symbol=USD`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the monthly time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=FX_MONTHLY&from_symbol=EUR&to_symbol=USD&apikey=demo

Downloadable CSV file:
[https://www.alphavantage.co/query?**function**=FX_MONTHLY&**from_symbol**=EUR&**to_symbol**=USD&**apikey**=demo&**datatype**=csv](https://www.alphavantage.co/query?function=FX_MONTHLY&from_symbol=EUR&to_symbol=USD&apikey=demo&datatype=csv)

Digital & Crypto Currencies

APIs under this section provide a wide range of data feed for digital and crypto currencies such as Bitcoin.

CURRENCY_EXCHANGE_RATE High Usage

This API returns the realtime exchange rate for any pair of digital currency (e.g., Bitcoin) or physical currency (e.g., USD).

API Parameters

❚ **Required:** `function`

The function of your choice. In this case, `function=CURRENCY_EXCHANGE_RATE`

❚ **Required:** `from_currency`

The currency you would like to get the exchange rate for. It can either be a physical currency or digital/crypto currency. For example: `from_currency=USD` or `from_currency=BTC` .

❚ **Required:** `to_currency`

The destination currency for the exchange rate. It can either be a physical currency or digital/crypto currency. For example: `to_currency=USD` or `to_currency=BTC` .

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Bitcoin to Chinese Yuan:
https://www.alphavantage.co/query?function=CURRENCY_EXCHANGE_RATE&from_currency=BTC&to_currency=CNY&apikey=demo

US Dollar to Japanese Yen:

https://www.alphavantage.co/query?function=CURRENCY_EXCHANGE_RATE&from_currency=USD&to_currency=JPY&apikey=demo

CRYPTO_RATING High Usage

Fundamental Crypto Asset Score (FCAS) is a comparative metric used to assess the fundamental health of crypto projects. The score is derived from the interactivity between primary project life-cycle factors: User Activity/Utility, Developer Behavior, and Market Maturity. Each crypto asset is given a composite numerical score, 0-1000, and an associated rating as follows:

RANK		SCORE
S	Superb	900-1000
A	Attractive	750-899
B	Basic	650-749
C	Caution	500-649
F	Fragile	Below 500

This API is powered by Flipside Crypto, an industry-leading rating agency for cryptocurrencies.

API Parameters

❚ Required: `function`

The function of your choice. In this case, `function=CRYPTO_RATING`

❚ Required: `symbol`

The cryptocurrency you would like to get the FCAS health rating for. Cryptocurrency symbols can be found in our digital/crypto currency list. For example: `symbol=BTC`.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=CRYPTO_RATING&symbol=BTC&apikey=demo

DIGITAL_CURRENCY_DAILY

This API returns the daily historical time series for a digital currency (e.g., BTC) traded on a specific market (e.g., CNY/Chinese Yuan), refreshed daily at midnight (UTC). Prices and volumes are quoted in both the market-specific currency and USD.

API Parameters

▌**Required:** `function`

The time series of your choice. In this case, `function=DIGITAL_CURRENCY_DAILY`

▌**Required:** `symbol`

The digital/crypto currency of your choice. It can be any of the currencies in the digital currency list. For example: `symbol=BTC`.

▌**Required:** `market`

The exchange market of your choice. It can be any of the market in the market list. For example: `market=CNY`.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_DAILY&symbol=BTC&market=CNY&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_DAILY&symbol=BTC&market=CNY&apikey=demo&datatype=csv

DIGITAL_CURRENCY_WEEKLY High Usage

This API returns the weekly historical time series for a digital currency (e.g., BTC) traded on a specific market (e.g., CNY/Chinese Yuan), refreshed daily at midnight (UTC). Prices and volumes are quoted in both the market-specific currency and USD.

API Parameters

❚ Required: `function`

The time series of your choice. In this case, `function=DIGITAL_CURRENCY_WEEKLY`

❚ Required: `symbol`

The digital/crypto currency of your choice. It can be any of the currencies in the digital currency list. For example: `symbol=BTC`.

❚ Required: `market`

The exchange market of your choice. It can be any of the market in the market list. For example: `market=CNY`.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

`https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_WEEKLY&symbol=BTC&market=CNY&apikey=demo`

Downloadable CSV file:
`https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_WEEKLY&symbol=BTC&market=CNY&apikey=demo&datatype=csv`

DIGITAL_CURRENCY_MONTHLY High Usage

This API returns the monthly historical time series for a digital currency (e.g., BTC) traded on a specific market (e.g., CNY/Chinese Yuan), refreshed daily at midnight (UTC). Prices and volumes are quoted in both the market-specific currency and USD.

API Parameters

▌ Required: `function`

The time series of your choice. In this case, `function=DIGITAL_CURRENCY_MONTHLY`

▌ Required: `symbol`

The digital/crypto currency of your choice. It can be any of the currencies in the digital currency list. For example: `symbol=BTC`.

▌ Required: `market`

The exchange market of your choice. It can be any of the market in the market list. For example: `market=CNY`.

▌ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_MONTHLY&symbol=BTC&market=CNY&apikey=demo

Downloadable CSV file:
https://www.alphavantage.co/query?function=DIGITAL_CURRENCY_MONTHLY&symbol=BTC&market=CNY&apikey=demo&datatype=csv

Technical Indicators

Technical indicator APIs for a given equity or currency exchange pair, derived from the underlying time series based stock API and forex data. All indicators are calculated from adjusted time series data to eliminate artificial price/volume perturbations from historical split and dividend events.

SMA High Usage

This API returns the simple moving average (SMA) values. See also: Investopedia article and mathematical reference.

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=SMA`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Required: `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

❚ Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:
https://www.alphavantage.co/query?function=SMA&symbol=IBM&interval=weekly&time_period=10&series_type=open&apikey=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?function=SMA&symbol=USDEUR&interval=weekly&time_period=10&series_type=open&apikey=demo

EMA High Usage

This API returns the exponential moving average (EMA) values. See also: mathematical reference.

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=EMA`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Required: `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

❚ Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=EMA&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

Forex (FX) or cryptocurrency pair:
`https://www.alphavantage.co/query?function=EMA&symbol=USDEUR&interval=weekly&time_period=10&series_type=open&apikey=demo`

WMA

This API returns the weighted moving average (WMA) values. See also: mathematical reference.

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=WMA`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Required: `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

❚ Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:
[https://www.alphavantage.co/query?**function**=WMA&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo]

DEMA

This API returns the double exponential moving average (DEMA) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=DEMA`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

`https://www.alphavantage.co/query?function=DEMA&symbol=IBM&interval=weekly&time_period=10&series_type=open&apikey=demo`

TEMA

This API returns the triple exponential moving average (TEMA) values. See also: mathematical reference.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=TEMA`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ **Required:** `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

❚ **Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=TEMA&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

TRIMA

This API returns the triangular moving average (TRIMA) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=TRIMA`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=TRIMA&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

KAMA

This API returns the Kaufman adaptive moving average (KAMA) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=KAMA`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** **`apikey`**

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=KAMA&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

MAMA

This API returns the MESA adaptive moving average (MAMA) values.

API Parameters

▌**Required:** **`function`**

The technical indicator of your choice. In this case, `function=MAMA`

▌**Required:** **`symbol`**

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** **`interval`**

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** **`series_type`**

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastlimit`

Positive floats are accepted. By default, `fastlimit=0.01`.

▌Optional: `slowlimit`

Positive floats are accepted. By default, `slowlimit=0.01`.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MAMA&**symbol**=IBM&**interval**=daily&**series_type**=close&**fastlimit**=0.02&**apikey**=demo

VWAP High Usage

This API returns the volume weighted average price (VWAP) for intraday time series. See also: Investopedia article.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=VWAP`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. In keeping with mainstream investment literatures on VWAP, the following intraday intervals are supported: `1min`, `5min`, `15min`, `30min`, `60min`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=VWAP&**symbol**=IBM&**interval**=15min&**apikey**=demo

T3

This API returns the triple exponential moving average (T3) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=T3`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each moving average value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=T3&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

MACD High Usage

This API returns the moving average convergence / divergence (MACD) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MACD`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastperiod`

Positive integers are accepted. By default, `fastperiod=12`.

▌Optional: `slowperiod`

Positive integers are accepted. By default, `slowperiod=26`.

▌Optional: `signalperiod`

Positive integers are accepted. By default, `signalperiod=9`.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:
https://www.alphavantage.co/query?function=MACD&symbol=IBM&interval=daily&series_type=open&apikey=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?function=MACD&symbol=USDEUR&interval=weekly&series_type=open&apikey=demo

MACDEXT

This API returns the moving average convergence / divergence values with controllable moving average type. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MACDEXT`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastperiod`

Positive integers are accepted. By default, `fastperiod=12`.

▌Optional: `slowperiod`

Positive integers are accepted. By default, `slowperiod=26`.

▌Optional: `signalperiod`

Positive integers are accepted. By default, `signalperiod=9`.

▌Optional: `fastmatype`

Moving average type for the faster moving average. By default, `fastmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `slowmatype`

Moving average type for the slower moving average. By default, `slowmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `signalmatype`

Moving average type for the signal moving average. By default, `signalmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** **`apikey`**

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=MACDEXT&**symbol**=IBM&**interval**=daily&**series_type**=open&**apikey**=demo

STOCH High Usage

This API returns the stochastic oscillator (STOCH) values. See also: Investopedia article and mathematical reference.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=STOCH`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Optional: `fastkperiod`

The time period of the fastk moving average. Positive integers are accepted. By default, `fastkperiod=5`.

❚ Optional: `slowkperiod`

The time period of the slowk moving average. Positive integers are accepted. By default, `slowkperiod=3`.

❚ Optional: `slowdperiod`

The time period of the slowd moving average. Positive integers are accepted. By default, `slowdperiod=3`.

❚ Optional: `slowkmatype`

Moving average type for the slowk moving average. By default, `slowkmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

❚ Optional: `slowdmatype`

Moving average type for the slowd moving average. By default, `slowdmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=STOCH&**symbol**=IBM&**interval**=daily&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=STOCH&**symbol**=USDEUR&**interval**=weekly&**apikey**=demo

STOCHF

This API returns the stochastic fast (STOCHF) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=STOCHF`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌Optional: `fastkperiod`

The time period of the fastk moving average. Positive integers are accepted. By default, `fastkperiod=5`.

▌Optional: `fastdperiod`

The time period of the fastd moving average. Positive integers are accepted. By default, `fastdperiod=3`.

▌Optional: `fastdmatype`

Moving average type for the fastd moving average. By default, `fastdmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?function=STOCHF&symbol=IBM&interval=daily&apikey=demo

RSI High Usage

This API returns the relative strength index (RSI) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=RSI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each RSI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

Equity:

https://www.alphavantage.co/query?**function**=RSI&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=RSI&**symbol**=USDEUR&**interval**=weekly&**time_period**=10&**series_type**=open&**apikey**=demo

STOCHRSI

This API returns the stochastic relative strength index (STOCHRSI) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=STOCHRSI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each STOCHRSI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastkperiod`

The time period of the fastk moving average. Positive integers are accepted. By default, `fastkperiod=5`.

▌Optional: `fastdperiod`

The time period of the fastd moving average. Positive integers are accepted. By default, `fastdperiod=3`.

▌Optional: `fastdmatype`

Moving average type for the fastd moving average. By default, `fastdmatype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=STOCHRSI&**symbol**=IBM&**interval**=daily&**time_period**=10&**series_type**=close&**fastkperiod**=6&**fastdmatype**=1&**apikey**=demo

WILLR

This API returns the Williams' %R (WILLR) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=WILLR`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ **Required:** `time_period`

Number of data points used to calculate each WILLR value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=WILLR&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

ADX High Usage

This API returns the average directional movement index (ADX) values. See also: Investopedia article and mathematical reference.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=ADX`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ **Required:** `time_period`

Number of data points used to calculate each ADX value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required: `apikey`**

Your API key. Claim your free API key here.

Example (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=ADX&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=ADX&**symbol**=USDEUR&**interval**=weekly&**time_period**=10&**apikey**=demo

ADXR

This API returns the average directional movement index rating (ADXR) values. See also: mathematical reference.

API Parameters

▌**Required: `function`**

The technical indicator of your choice. In this case, `function=ADXR`

▌**Required: `symbol`**

The name of the security of your choice. For example: `symbol=IBM`

▌**Required: `interval`**

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required: `time_period`**

Number of data points used to calculate each ADXR value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required: `apikey`**

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=ADXR&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

APO

This API returns the absolute price oscillator (APO) values. See also: mathematical reference.

API Parameters

▌**Required: `function`**

The technical indicator of your choice. In this case, `function=APO`

▌**Required: `symbol`**

The name of the security of your choice. For example: `symbol=IBM`

▌**Required: `interval`**

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required: `series_type`**

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastperiod`

Positive integers are accepted. By default, `fastperiod=12`.

▌Optional: `slowperiod`

Positive integers are accepted. By default, `slowperiod=26`.

▌Optional: `matype`

Moving average type. By default, `matype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=APO&**symbol**=IBM&**interval**=daily&**series_type**=close&**fastperiod**=10&**matype**=1&**apikey**=demo

PPO

This API returns the percentage price oscillator (PPO) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=PPO`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `fastperiod`

Positive integers are accepted. By default, `fastperiod=12`.

▌Optional: `slowperiod`

Positive integers are accepted. By default, `slowperiod=26`.

▌Optional: `matype`

Moving average type. By default, `matype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=PPO&**symbol**=IBM&**interval**=daily&**series_type**=close&**fastperiod**=10&**matype**=1&**apikey**=demo

MOM

This API returns the momentum (MOM) values. See also: Investopedia article and mathematical reference.

API Parameters

▌Required: `function`

The technical indicator of your choice. In this case, `function=MOM`

▌Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌Required: `time_period`

Number of data points used to calculate each MOM value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌Required: `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MOM&**symbol**=IBM&**interval**=daily&**time_period**=10&**series_type**=close&**apikey**=demo

BOP

This API returns the balance of power (BOP) values.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=BOP`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=BOP&**symbol**=IBM&**interval**=daily&**apikey**=demo

CCI High Usage

This API returns the commodity channel index (CCI) values. See also: Investopedia article and mathematical reference.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=CCI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each CCI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=CCI&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=CCI&**symbol**=USDEUR&**interval**=weekly&**time_period**=10&**apikey**=demo

CMO

This API returns the Chande momentum oscillator (CMO) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=CMO`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each CMO value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=CMO&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=close&**apikey**=demo

ROC

This API returns the rate of change (ROC) values. See also: Investopedia article.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=ROC`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each ROC value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=ROC&**symbol**=IBM&**interval**=weekly&**time_period**=10&**series_type**=close&**apikey**=demo

ROCR

This API returns the rate of change ratio (ROCR) values. See also: Investopedia article.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=ROCR`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each ROCR value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=ROCR&**symbol**=IBM&**interval**=daily&**time_period**=10&**series_type**=close&**apikey**=demo

AROON High Usage

This API returns the Aroon (AROON) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=AROON`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each AROON value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=AROON&**symbol**=IBM&**interval**=daily&**time_period**=14&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=AROON&**symbol**=USDEUR&**interval**=weekly&**time_period**=14&**apikey**=demo

AROONOSC

This API returns the Aroon oscillator (AROONOSC) values. See also: mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=AROONOSC`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each AROONOSC value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=AROONOSC&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

MFI

This API returns the money flow index (MFI) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MFI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each MFI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MFI&**symbol**=IBM&**interval**=weekly&**time_period**=10&**apikey**=demo

TRIX

This API returns the 1-day rate of change of a triple smooth exponential moving average (TRIX) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=TRIX`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▍Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▍Required: `time_period`

Number of data points used to calculate each TRIX value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▍Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▍Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▍Required: `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=TRIX&**symbol**=IBM&**interval**=daily&**time_period**=10&**series_type**=close&**apikey**=demo

ULTOSC

This API returns the ultimate oscillator (ULTOSC) values. See also: mathematical reference.

API Parameters

▍Required: `function`

The technical indicator of your choice. In this case, `function=ULTOSC`

▍Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌Optional: `timeperiod1`

The first time period for the indicator. Positive integers are accepted. By default, `timeperiod1=7`.

▌Optional: `timeperiod2`

The second time period for the indicator. Positive integers are accepted. By default, `timeperiod2=14`.

▌Optional: `timeperiod3`

The third time period for the indicator. Positive integers are accepted. By default, `timeperiod3=28`.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Examples (click for JSON output)

https://www.alphavantage.co/query?**function**=ULTOSC&**symbol**=IBM&**interval**=daily&**timeperiod1**=8&**apikey**=demo

https://www.alphavantage.co/query?**function**=ULTOSC&**symbol**=IBM&**interval**=daily&**apikey**=demo

DX

This API returns the directional movement index (DX) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=DX`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each DX value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?function=DX&symbol=IBM&interval=daily&time_period=10&apikey=demo

MINUS_DI

This API returns the minus directional indicator (MINUS_DI) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MINUS_DI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each MINUS_DI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MINUS_DI&**symbol**=IBM&**interval**=weekly&**time_period**=10&**apikey**=demo

PLUS_DI

This API returns the plus directional indicator (PLUS_DI) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=PLUS_DI`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each PLUS_DI value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=PLUS_DI&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

MINUS_DM

This API returns the minus directional movement (MINUS_DM) values. See also: Investopedia article

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MINUS_DM`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each MINUS_DM value. Positive integers are accepted (e.g., `time_period=60` , `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json` . Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MINUS_DM&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

PLUS_DM

This API returns the plus directional movement (PLUS_DM) values. See also: Investopedia article

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=PLUS_DM`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min` , `5min` , `15min` , `30min` , `60min` , `daily` , `weekly` , `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each PLUS_DM value. Positive integers are accepted (e.g., `time_period=60` , `time_period=200`)

▌ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌ **Required: `apikey`**

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=PLUS_DM&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

BBANDS High Usage

This API returns the Bollinger bands (BBANDS) values. See also: Investopedia article and mathematical reference.

API Parameters

▌ **Required: `function`**

The technical indicator of your choice. In this case, `function=BBANDS`

▌ **Required: `symbol`**

The name of the security of your choice. For example: `symbol=IBM`

▌ **Required: `interval`**

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌ **Required: `time_period`**

Number of data points used to calculate each BBANDS value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌ **Required: `series_type`**

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `nbdevup`

The standard deviation multiplier of the upper band. Positive integers are accepted. By default, `nbdevup=2`.

▌Optional: `nbdevdn`

The standard deviation multiplier of the lower band. Positive integers are accepted. By default, `nbdevdn=2`.

▌Optional: `matype`

Moving average type of the time series. By default, `matype=0`. Integers 0 - 8 are accepted with the following mappings. 0 = Simple Moving Average (SMA), 1 = Exponential Moving Average (EMA), 2 = Weighted Moving Average (WMA), 3 = Double Exponential Moving Average (DEMA), 4 = Triple Exponential Moving Average (TEMA), 5 = Triangular Moving Average (TRIMA), 6 = T3 Moving Average, 7 = Kaufman Adaptive Moving Average (KAMA), 8 = MESA Adaptive Moving Average (MAMA).

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required: `apikey`**

Your API key. Claim your free API key here.

Example (click for JSON output)

Equity:
https://www.alphavantage.co/query?**function**=BBANDS&**symbol**=IBM&**interval**=weekly&**time_period**=5&**series_type**=close&**nbdevup**=3&**nbdevdn**=3&**apikey**=demo

Forex (FX) or cryptocurrency pair:
https://www.alphavantage.co/query?**function**=BBANDS&**symbol**=USDEUR&**interval**=weekly&**time_period**=5&**series_type**=close&**nbdevup**=3&**nbdevdn**=3&**apikey**=demo

MIDPOINT

This API returns the midpoint (MIDPOINT) values. MIDPOINT = (highest value + lowest value)/2.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MIDPOINT`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each MIDPOINT value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MIDPOINT&**symbol**=IBM&**interval**=daily&**time_period**=10&**series_type**=close&**apikey**=demo

MIDPRICE

This API returns the midpoint price (MIDPRICE) values. MIDPRICE = (highest high + lowest low)/2.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=MIDPRICE`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each MIDPRICE value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=MIDPRICE&**symbol**=IBM&**interval**=daily&**time_period**=10&**apikey**=demo

SAR

This API returns the parabolic SAR (SAR) values. See also: Investopedia article and mathematical reference.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=SAR`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Optional: `acceleration`

The acceleration factor. Positive floats are accepted. By default, `acceleration=0.01`.

❚ Optional: `maximum`

The acceleration factor maximum value. Positive floats are accepted. By default, `maximum=0.20`.

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=SAR&**symbol**=IBM&**interval**=weekly&**acceleration**=0.05&**maximum**=0.25&**apikey**=demo

TRANGE

This API returns the true range (TRANGE) values. See also: mathematical reference

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=TRANGE`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=TRANGE&**symbol**=IBM&**interval**=daily&**apikey**=demo

ATR

This API returns the average true range (ATR) values. See also: Investopedia article and mathematical reference

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=ATR`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each ATR value. Positive integers are accepted (e.g., `time_period=60`, `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=ATR&**symbol**=IBM&**interval**=daily&**time_period**=14&**apikey**=demo

NATR

This API returns the normalized average true range (NATR) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=NATR`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `time_period`

Number of data points used to calculate each NATR value. Positive integers are accepted (e.g., `time_period=60` , `time_period=200`)

▌Optional: `datatype`

By default, `datatype=json` . Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=NATR&**symbol**=IBM&**interval**=weekly&**time_period**=14&**apikey**=demo

AD High Usage

This API returns the Chaikin A/D line (AD) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=AD`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min` , `5min` , `15min` , `30min` , `60min` , `daily` , `weekly` , `monthly`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=AD&**symbol**=IBM&**interval**=daily&**apikey**=demo

ADOSC

This API returns the Chaikin A/D oscillator (ADOSC) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=ADOSC`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌Optional: `fastperiod`

The time period of the fast EMA. Positive integers are accepted. By default, `fastperiod=3`.

▌Optional: `slowperiod`

The time period of the slow EMA. Positive integers are accepted. By default, `slowperiod=10`.

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example(click for JSON output)

https://www.alphavantage.co/query?**function**=ADOSC&**symbol**=IBM&**interval**=daily&**fastperiod**=5&**apikey**=demo

OBV High Usage

This API returns the on balance volume (OBV) values. See also: Investopedia article and mathematical reference.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=OBV`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?
function=OBV&**symbol**=IBM&**interval**=weekly&**apikey**=demo

HT_TRENDLINE

This API returns the Hilbert transform, instantaneous trendline (HT_TRENDLINE) values.

API Parameters

❚ **Required:** `function`

The technical indicator of your choice. In this case, `function=HT_TRENDLINE`

❚ **Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ **Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ **Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ **Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?
function=HT_TRENDLINE&**symbol**=IBM&**interval**=daily&**series_type**=close&**apikey**=demo

HT_SINE

This API returns the Hilbert transform, sine wave (HT_SINE) values.

API Parameters

❚ Required: `function`

The technical indicator of your choice. In this case, `function=HT_SINE`

❚ Required: `symbol`

The name of the security of your choice. For example: `symbol=IBM`

❚ Required: `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

❚ Required: `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

❚ Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

❚ Required: `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?function=HT_SINE&symbol=IBM&interval=daily&series_type=close&apikey=demo

HT_TRENDMODE

This API returns the Hilbert transform, trend vs cycle mode (HT_TRENDMODE) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=HT_TRENDMODE`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=HT_TRENDMODE&**symbol**=IBM&**interval**=weekly&**series_type**=close&**apikey**=demo

HT_DCPERIOD

This API returns the Hilbert transform, dominant cycle period (HT_DCPERIOD) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=HT_DCPERIOD`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=HT_DCPERIOD&**symbol**=IBM&**interval**=daily&**series_type**=close&**apikey**=demo

HT_DCPHASE

This API returns the Hilbert transform, dominant cycle phase (HT_DCPHASE) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=HT_DCPHASE`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=HT_DCPHASE&**symbol**=IBM&**interval**=daily&**series_type**=close&**apikey**=demo

HT_PHASOR

This API returns the Hilbert transform, phasor components (HT_PHASOR) values.

API Parameters

▌**Required:** `function`

The technical indicator of your choice. In this case, `function=HT_PHASOR`

▌**Required:** `symbol`

The name of the security of your choice. For example: `symbol=IBM`

▌**Required:** `interval`

Time interval between two consecutive data points in the time series. The following values are supported: `1min`, `5min`, `15min`, `30min`, `60min`, `daily`, `weekly`, `monthly`

▌**Required:** `series_type`

The desired price type in the time series. Four types are supported: `close`, `open`, `high`, `low`

▌Optional: `datatype`

By default, `datatype=json`. Strings `json` and `csv` are accepted with the following specifications: `json` returns the daily time series in JSON format; `csv` returns the time series as a CSV (comma separated value) file.

▌**Required:** `apikey`

Your API key. Claim your free API key here.

Example (click for JSON output)

https://www.alphavantage.co/query?**function**=HT_PHASOR&**symbol**=IBM&**interval**=weekly&**series_type**=close&**apikey**=demo