<https://api.bitfinex.com/v1/pubticker/btcusd>

## Api Documentation

### URL:

The URL to use is

<https://api.bitfinex.com/v1>

The number of requests is limited to 60/minutes.

### Authentication

Authentication is done using an API key and a secret. To generate this pair, go to [the API page](https://www.bitfinex.com/account/api)

Say the client wants to make a request to

POST https://api.bitfinex.com/v1/order/new

With a payload of

{  
"request": "/v1/order/new",  
"nonce": "1234",  
"option1": ...  
}

The nonce provided must be strictly increasing.  
  
To authenticate a request, use the following:

payload = parameters-dictionary -> JSON encode -> base64  
signature = HMAC-SHA384(payload, api-secret) as hexadecimal  
send (api-key, payload, signature)

These are encoded as HTTP headers named:

X-BFX-APIKEY  
X-BFX-PAYLOAD  
X-BFX-SIGNATURE

### Parameters nomenclature

Requests parameters for POST requests (authenticated) (presented below in the "Request" sections) are part of the PAYLOAD, not GET parameters.

Requests parameters for GET requests (non-authenticated) are GET parameters, appended to the call URL like this: /v1/call/?paraneter=value

### Unauthenticated

#### Ticker

GET /pubticker/:symbol

Gives innermost bid and asks and information on the most recent trade, as well as high, low and volume of the last 24 hours.

#### Response:

mid (price): (bid + ask) / 2  
bid (price): Innermost bid.  
ask (price): Innermost ask.  
last\_price (price) The price at which the last order executed.  
low (price): Lowest trade price of the last 24 hours  
high (price): Highest trade price of the last 24 hours  
volume (price): Trading volume of the last 24 hours  
timestamp (time) The timestamp at which this information was valid.

#### Stats

GET /stats/:symbol

Various statistics about the requested pairs.

##### Response

An array of the following:  
period (integer), period covered in days  
volume (price)

#### Lendbook

GET /lendbook/:currency

Get the full lend book.

##### Request:

limit\_bids (int): Optional. Limit the number of bids (loan demands) returned. May be 0 in which case the array of bids is empty. Default is 50.   
limit\_asks (int): Optional. Limit the number of asks (loan offers) returned. May be 0 in which case the array of asks is empty. Default is 50. 

##### Response

bids (array of loan demands):  
rate (rate in % per 365 days)  
amount (decimal)  
period (days): minimum period for the loan  
timestamp (time)  
frr (yes/no): "Yes" if the offer is at Flash Return Rate, "No" if the offer is at fixed rate  
asks (array of loan offers)  
rate (rate in % per 365 days)  
amount (decimal)  
period (days): maximum period for the loan  
timestamp (time)  
frr (yes/no): "Yes" if the offer is at Flash Return Rate, "No" if the offer is at fixed rate

#### Orderbook

GET /book/:symbol

Get the full order book.

##### Request:

limit\_bids (int): Optional. Limit the number of bids returned. May be 0 in which case the array of bids is empty. Default is 50.   
limit\_asks (int): Optional. Limit the number of asks returned. May be 0 in which case the array of asks is empty. Default is 50.   
group (0/1): Optional. If 1, orders are grouped by price in the orderbook. If 0, orders are not grouped and sorted individually. Default is 1

##### Response

bids (array)  
price (price)  
amount (decimal)  
timestamp (time)  
asks (array)  
price (price)  
amount (decimal)  
timestamp (time)

#### Trades

GET /trades/:symbol

Get a list of the most recent trades for the given symbol.

##### Request

timestamp (time): Optional. Only show trades at or after this timestamp.  
limit\_trades (int): Optional. Limit the number of trades returned. Must be >= 1. Default is 50.

##### Response

An array of dictionaries:  
tid (integer)  
timestamp (time)  
price (price)  
amount (decimal)  
exchange (string)  
type (string) "sell" or "buy" (can be "" if undetermined)

#### Lends

GET /lends/:currency

Get a list of the most recent swaps data for the given currency: total amount lent and Flash Return Rate (in % by 365 days) over time.

##### Request

timestamp (time): Optional. Only show data at or after this timestamp.  
limit\_lends (int): Optional. Limit the number of swaps data returned. Must be >= 1. Default is 50.

##### Response

An array of dictionaries  
rate (decimal, % by 365 days): Average rate of total swaps opened at fixed rates, ie past Flash Return Rate annualized  
amount\_lent (decimal): Total amount of open swaps in the given currency  
timestamp (time)

#### Symbols

GET /symbols

Get a list of valid symbol IDs.

##### Response

A list of symbol names. Currently "btcusd", "ltcusd", "ltcbtc".

#### Symbols Details

GET /symbols\_details

Get a list of valid symbol IDs and the pair details.

##### Response

An array of dictionaries:  
pair (string): the pair code  
price\_precision (integer): Maximum number of significan digits for price in this pair  
initial\_margin (decimal): Initial margin required to open a position in this pair  
minimum\_margin (decimal): Minimal margin to maintain (in %)  
maximum\_order\_size (decimal): Maximum order size of the pair  
expiration (string): Expiration date for limited contracts/pairs

### Authenticated

#### New deposit

POST /deposit/new

Return your deposit address to make a new deposit

##### Request

currency (string): The currency to deposit in ("BTC", "LTC" or "DRK").  
method (string): Method of deposit (methods accepted: "bitcoin", "litecoin", "darkcoin".  
wallet\_name (string): Wallet to deposit in (accepted: "trading", "exchange", "deposit"). Your wallet needs to already exist

##### Response

result (string): "success" or "error"  
method (string)  
currency (string)  
address (string): The deposit address (or error message if result = "error")

#### New order

POST /order/new

Submit a new order.

##### Request

symbol (string): The name of the symbol (see `/symbols`).  
amount (decimal): Order size: how much to buy or sell.  
price (price): Price to buy or sell at. Must be positive. Use random number for market orders.  
exchange (string): "bitfinex".  
side (string): Either "buy" or "sell".  
type (string): Either "market" / "limit" / "stop" / "trailing-stop" / "fill-or-kill" / "exchange market" / "exchange limit" / "exchange stop" / "exchange trailing-stop" / "exchange fill-or-kill". (type starting by "exchange " are exchange orders, others are margin trading orders)   
is\_hidden (bool) true if the order should be hidden. Default is false.

##### Response

order\_id (int): A randomly generated ID for the order.  
and the information given by /order/status

| **Order types** | |
| --- | --- |
| **Margin trading type** | **Exchange type** |
| LIMIT | EXCHANGE LIMIT |
| MARKET | EXCHANGE MARKET |
| STOP | EXCHANGE STOP |
| TRAILING STOP | EXCHANGE TRAILING STOP |
| FILL-OR-KILL | EXCHANGE FILL-OR-KILL |

#### Multiple new orders

POST /order/new/multi

Submit several new orders at once.

##### Request

The request is an array of the array containing the order options sent with the previous call /order/new. That is an array named "orders", containing the following array:   
symbol (string): The name of the symbol (see `/symbols`).  
amount (decimal): Order size: how much to buy or sell.  
price (price): Price to buy or sell at. May omit if a market order.  
exchange (string): "bitfinex", "bitstamp", "all" (for no routing).  
side (string): Either "buy" or "sell".  
type (string): Either "market" / "limit" / "stop" / "trailing-stop" / "fill-or-kill".

Important: You can not place more than 10 orders at once.

##### Response

order\_ids (array): An array of generated IDs and given by /order/status for each of the orders opened.

#### Cancel order

POST /order/cancel

Cancel an order.

##### Request

order\_id (int): The order ID given by `/order/new`.

##### Response

Result of /order/status for the cancelled order.

#### Cancel multiple orders

POST /order/cancel/multi

Cancel multiples orders at once.

##### Request

order\_ids (array): An array of the order IDs given by `/order/new` or `/order/new/multi`.

##### Response

Confirmation of cancellation of the orders.

#### Cancel all active orders

GET /order/cancel/all

Cancel all active orders at once.

##### Response

Confirmation of cancellation of all active orders.

#### Replace order

POST /order/cancel/replace

Replace an order with a new one.

##### Request

order\_id (int): The order ID (to be replaced) given by `/order/new`.  
symbol (string): The name of the symbol (see `/symbols`).  
amount (decimal): Order size: how much to buy or sell.  
price (price): Price to buy or sell at. May omit if a market order.  
exchange (string): "bitfinex", "bitstamp", "all" (for no routing).  
side (string): Either "buy" or "sell".  
type (string): Either "market" / "limit" / "stop" / "trailing-stop" / "fill-or-kill" / "exchange market" / "exchange limit" / "exchange stop" / "exchange trailing-stop" / "exchange fill-or-kill". (type starting by "exchange " are exchange orders, others are margin trading orders)   
is\_hidden (bool) true if the order should be hidden. Default is false.

##### Response

order\_id (int): A randomly generated ID for the order.  
and the information given by /order/status

| **Order types** |
| --- |
| See "/order/new" |

#### Order status

POST /order/status

Get the status of an order. Is it active? Was it cancelled? To what extent has it been executed? etc.

##### Request

order\_id (int): The order ID given by `/order/new`.

##### Response

symbol (string): The symbol name the order belongs to.  
exchange (string): "bitfinex", "bitstamp".  
price (decimal): The price the order was issued at (can be null for market orders).  
avg\_execution\_price (decimal): The average price at which this order as been executed so far. 0 if the order has not been executed at all. side (string): Either "buy" or "sell".  
type (string): Either "market" / "limit" / "stop" / "trailing-stop".  
timestamp (time): The timestamp the order was submitted.  
is\_live (bool): Could the order still be filled?  
is\_cancelled (bool): Has the order been cancelled?  
was\_forced (bool): For margin only: true if it was forced by the system.  
executed\_amount (decimal): How much of the order has been executed so far in its history?  
remaining\_amount (decimal): How much is still remaining to be submitted?  
original\_amount (decimal): What was the order originally submitted for?

#### Active Orders

POST /orders

View your active orders.

##### Response

An array of the results of `/order/status` for all your live orders.

#### Active Positions

POST /positions

View your active positions.

##### Response

An array of your active positions.

#### Claim position

POST /position/claim

Claim a position. A position can be claimed if:

* It is a long position: The amount in the last unit of the position pair that you have in your trading wallet AND/OR the realized profit of the position is greater or equal to the purchase amount of the position (base price \* position amount) and the pending swap. For example, for a long BTCUSD position, you can claim the position if the amount of USD you have in the trading wallet is greater than the base price \* the position amount and the unrealized swap.
* It is a short position: The amount in the first unit of the position pair that you have in your trading wallet is greater or equal to the amount of the position and the pending swap.

##### Request

position\_id (int): The position ID given by `/positions`.

##### Response

Status of the position for the claimed position, if the position could be claimed.

#### Balance history

POST /history

View all of your balance ledger entries

##### Request

currency (string): The currency to look for.  
since (time): Optional. Return only the history after this timestamp.  
until (time): Optional. Return only the history before this timestamp.  
limit (int): Optional. Limit the number of entries to return. Default is 500.  
wallet (string): Optional. Return only entries that took place in this wallet. Accepted inputs are: "trading", "exchange", "deposit".

##### Response

An array of dictionaries:  
currency (string)  
amount (decimal): Positive (credit) or negative (debit)  
balance (decimal): Wallet balance after the current entry  
description (string): Description of the entry. Includes the wallet in which the operation took place  
timestamp (time)

#### Deposits and withdrawals history

POST /history/movements

View your past deposits/withdrawals

##### Request

currency (string): The currency to look for.  
method (string): Optional. The method of the deposit/withdrawal (can be "bitcoin", "litecoin", "darkcoin", "wire", "egopay").  
since (time): Optional. Return only the history after this timestamp.  
until (time): Optional. Return only the history before this timestamp.  
limit (int): Optional. Limit the number of entries to return. Default is 500.

##### Response

An array of dictionaries:  
currency (string)  
method (string)  
type (string)  
amount (decimal): Absolute value of the movement  
description (string): Description of the movement (txid, destination address,,,,)  
timestamp (time)

#### Past trades

POST /mytrades

View your past trades

##### Request

symbol (string): The pair traded (BTCUSD, LTCUSD, LTCBTC).  
timestamp (time): Trades made before this timestamp won't be returned.  
limit\_trades (int): Optional. Limit the number of trades returned. Default is 50.

##### Response

An array of dictionaries:  
price (price)  
amount (decimal)  
timestamp (time): return only trades after or at the time specified here  
until (time): return only trades before or a the time specified here  
exchange (string)  
type (string) Sell or Buy  
fee\_currency (string) Currency you paid this trade's fee in  
fee\_amount (decimal) Amount of fees you paid for this trade  
tid (integer) unique identification number of the trade  
order\_id (integer) unique identification number of the parent order of the trade

#### New offer (lending or borrowing)

POST /offer/new

Submit a new offer.

##### Request

currency (string): The name of the currency.  
amount (decimal): Offer size: how much to lend or borrow.  
rate (decimal): Rate to lend or borrow at. **In percentage per 365 days**.  
period (integer): Number of days of the loan (in days)  
direction (string): Either "lend" or "loan".

##### Response

offer\_id (int): A randomly generated ID for the offer.  
and the information given by /offer/status

#### Cancel offer

POST /offer/cancel

Cancel an offer.

##### Request

offer\_id (int): The offer ID given by `/offer/new`.

##### Response

Result of /offer/status for the cancelled offer.

#### Offer status

POST /offer/status

Get the status of an offer. Is it active? Was it cancelled? To what extent has it been executed? etc.

##### Request

offer\_id (int): The offer ID given by `/offer/new`.

##### Response

currency (string): The currency name of the offer.  
rate (decimal): The rate the offer was issued at (in % per 365 days).  
period (integer): The number of days of the offer.  
direction (string): Either "lend" or "loan".  
type (string): Either "market" / "limit" / "stop" / "trailing-stop".  
timestamp (time): The timestamp the offer was submitted.  
is\_live (bool): Could the offer still be filled?  
is\_cancelled (bool): Has the offer been cancelled?  
executed\_amount (decimal): How much of the offer has been executed so far in its history?  
remaining\_amount (decimal): How much is still remaining to be submitted?  
original\_amount (decimal): What was the offer originally submitted for?

#### Active Offers

POST /offers

View your active offers.

##### Response

An array of the results of `/offer/status` for all your live offers (lending or borrowing).

#### Active Credits

POST /credits

View your funds currently lent (active credits).

##### Response

An array of your active credits.

#### Active Swaps used in a margin position

POST /taken\_swaps

View your funds currently borrowed and used in a margin position (active taken swaps).

##### Response

An array of your active taken swaps.

#### Close swap

POST /swap/close

Close a swap taken in a margin position

##### Request

swap\_id (int): The swap ID given by `/taken\_swaps`.

##### Response

Status of the swap closed if it could be closed.

#### Wallet Balances

POST /balances

See your balances.

##### Response

A list of wallet balances:  
type (string): "trading", "deposit" or "exchange".  
currency (string): Currency   
amount (decimal): How much balance of this currency in this wallet  
available (decimal): How much X there is in this wallet that is available to trade.

#### Account informations

POST /account\_infos

Return information about your account (trading fees).

##### Response

fees: an array of dictionaries:  
pairs (string): The currency included in the pairs with this fee schedule  
maker\_fees (decimal): Your current fees for maker orders (limit orders not marketable, in percent)  
taker\_fees (decimal): Your current fees for taker orders (marketable order, in percent)

#### Margin informations

POST /margin\_infos

See your trading wallet information for margin trading.

##### Response

margin\_balance (decimal): the USD value of all your trading assets (based on last prices)  
unrealized\_pl (decimal): The unrealized profit/loss of all your open positions  
unrealized\_swap (decimal): The unrealized swap of all your open positions  
net\_value (decimal): Your net value (the USD value of your trading wallet, including your margin balance, your unrealized P/L and swap)  
required\_margin (decimal): The minimum net value to maintain in your trading wallet, under which all of your positions are fully liquidated  
margin\_limits (array of dictionaries): The list of margin limits for each pair. The array gives you the following information, for each pair:  
on\_pair (string): The pair for which these limits are valid  
initial\_margin (decimal): The minimum margin (in %) to maintain to open or increasse a position  
tradable\_balance (decimal): Your tradable balance in USD (the maximum size you can open on leverage for this pair)  
margin\_requirements (decimal): The maintenance margin (% of the USD value of all of your open positions in the current pair to maintain)