



Karsha Exchange API 2.0

REVISION 1.2

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Intrudocion

Karsha has a feature-rich API for automations. All of our API methods reside inside this base URL:

<https://karsha.biz/api>.

Input Parameters

If any method needs an input parameter, it either resides inside the call URL, or must be passed as an HTTP POST parameter. Some methods don't need POST parameters at all and all of their required parameters are passed inside the calling URL.

Outputs

All outputs are in JSON format. Every method would return an integer as the result. For successful calls, this variable would be set to 0, or a positive integer. In case of errors, this parameter would be set to a negative integer which indicates the error, and an extra output named "message" which describes the error.

Output Result

While the "result" output would be set to 0 in most successful API calls, in some special calls, this variable might also be a positive integer which would indicate different output structures of a single function. For example, when calling the "pay" method (which generates the payment URI for an order), you might get one of these outputs as the result:

An error:

```
{"result":-15,"message":"Order not found."}
{"result":-16,"message":"The security token for this order is not valid."}
```

Or a successful result:

```
{"result":0,"uri":"litecoin:LMRaYWaYjLcwm8GEnhheJMDmW2FyBiDZBk?amount=0&message=Exchange+Order+%23431575"}
{"result":1,"html":"HTML code for payment."}
{"result":2,"wallet":"LMRaYWaYjLcwm8GEnhheJMDmW2FyBiDZBk"}
```

Any of the last three outputs shows a successful API call, but indicates a different output type.

Security Token

Every order has an integer "Order ID" and a 128-bit security token encoded as a 32-char hexadecimal string. This token is given to you when you register an order. Every operation on that order, including getting its status, finishing the order, etc., needs you passing the token to the API method.

Dates

All dates are kept in the database in UTC timezone. In order for API calls to return the dates in local timezone of the customer, you can set a "tzo" cookie before calling any method. The "tzo" cookie must be set to a signed integer ranged from -720 to +720, indicating the timezone difference of the customer to the UTC in minutes. For example, "tzo" is set to -420 for the UTC-7:00 timezone.

Get Exchange Rates

Request URL	https://karsha.biz/api/rate/<FromSystem>/<ToSystem>/<Amount>	
Request Post	None.	
Response	result	API call result (0 on success).
	from_amount	Exchange amount.
	from_usd	Exchange amount equivalent in USD.
	to_amount	Receive amount.
	to_usd	Receive amount equivalent in USD.
	from_sys	Source system symbol.
	from_sys_name	Source system name.
	to_sys	Destination system symbol.
	to_sys_name	Destination system name.
	exchange_rate	The result of dividing to_amount to from_amount.
	pl_usd	Profit/loss based on USD equivalent of amounts.
	pl_usd_percent	Profit/loss percentage to from_amount.
Possible Errors	-1	Exchange orders from XCoin to YCoin are temporarily unavailable.
	-8	Minimum order size for exchange orders from XCoin to YCoin is AAAAA XCN.
	-9	Maximum order size for exchange orders from XCoin to YCoin is BBBBB XCN.
Example	https://karsha.biz/api/rate/BTC/LTC/1	
Example Post	None.	
Example Response	<pre>{ "result":0, "from_amount":1, "from_usd":17325.8, "to_amount":55.6715, "to_usd":16813.1827005, "from_sys":"BTC", "from_sys_name":"Bitcoin", "to_sys":"LTC", "to_sys_name":"Litecoin", "exchange_rate":55.6715, "pl_usd":-512.6172995, "pl_usd_percent":-2.9586933907814 }</pre>	

Get Exchange Limits

Request URL	https://karsha.biz/api/limits/<FromSystem>/<ToSystem>	
Request Post	None.	
Response	result	API call result (0 on success).
	from_sys	Source system symbol.
	from_sys_name	Source system name.
	to_sys	Destination system symbol.
	to_sys_name	Destination system name.
	min	Minimum exchange amount.
	min_usd	Minimum exchange amount USD equivalent.
	max	Maximum exchange amount.
max_usd	Maximum exchange amount USD equivalent.	
Possible Errors	-1	Exchange orders from XCoin to YCoin are temporarily unavailable.
Example	https://karsha.biz/api/limits/BTC/LTC	
Example Post	None.	
Example Response	<pre>{ "min":0.01406709, "max":102.42442, "result":0, "from_sys":"BTC", "from_sys_name":"Bitcoin", "to_sys":"LTC", "to_sys_name":"Litecoin", "min_usd":243.723587922, "max_usd":1774585.016036 }</pre>	

Check Wallet Address

Request URL	https://karsha.biz/api/wallet/<FromSystem>/<Address>	
Request Post	None.	
Response	result	API call result (0 on success).
	valid	Boolean shows if the address is valid or not.
Possible Errors	None.	
Example	https://karsha.biz/api/wallet/BTC/1NiNja1bUmhSoTXozBRBEtR8LeF9TGbZBN	
Example Post	None.	
Example Response	<pre>{ "result":0, "valid":true }</pre>	

Register Exchange Order

Request URL	https://karsha.biz/api/order	
Request Post	from_sys	Source system symbol.
	to_sys	Destination system symbol.
	amount	Exchange amount.
	wallet	Destination account/wallet address.
	email [optional]	Customer email address or Telegram username for order updates.
Response	Order information on success.	
Possible Errors	-2	You have not specified the Exchange Amount.
	-3	You have not specified the Destination Wallet.
	-4	You have entered a Telegram Username, but we don't have your username in our database. Please first message our Telegram Bot (@KarshaBizBot), then retry to order.
	-5	You have entered an Invalid E-mail Address. If you want to enter your Telegram Username instead, please first message our Telegram Bot (@KarshaBizBot), then retry to order.
	-6	You have reached the limit of registering maximum 5 orders per 10 minutes. Please try again in X minutes.
	-7	You've entered an Invalid XCoin Account.
	-8	Minimum order size for exchange orders from XCoin to YCoin is AAAAA XCN.
	-9	Maximum order size for exchange orders from XCoin to YCoin is BBBB XCN.
	-10	An Unknown Error happened while trying to order your exchange. It might be because you've entered an invalid account, either your selected source system or destination systems are temporarily or permanently unavailable, the selected exchange direction is not available, the exchange minimum or maximum amounts has been changed, or any other reason. We apologize for any inconvenience caused by this problem. You're welcome to try again.
	-11	Error in registering the order in our database.
	Example	https://karsha.biz/api/order
Example Post	from_sys=LTC& to_sys=BTC& amount=0.5& wallet=1NiNja1bUmhSoTXozBRBEtR8LeF9TGbZBN	
Example Response	Order status.	

Order Payment

Request URL	https://karsha.biz/api/pay/<OrderID>/<Token>	
Request Post	None.	
Response	<pre>{ "result":0, "uri": "<Payment URI>" } Or { "result":1, "html": "<HTML Code>" } Or { "result":2, "wallet": "<Wallet/Account Address>" }</pre> <p>Based on the source system.</p>	
Possible Errors	-15	Order not found.
	-16	The security token for this order is not valid.
Example	https://karsha.biz/api/pay/431575/e6163ef9da20a6a15f3856004a02ccf8	
Example Post	None.	
Example Response	<pre>{ "result":0, "uri":"litecoin:LMRaYwaYjLcwm8GEnhheJMDmW2FyBiDZBk?amount=0&message=Exchange+Order+%23431575" }</pre>	

Finish Order

Request URL	https://karsha.biz/api/finish/<OrderID>/<Token>	
Request Post	txid	Transaction ID or batch number
Response	Order status.	
Possible Errors	-12	The "txid" field is required.
	-13	This exchange direction doesn't need registering the Transaction ID.
	-14	Invalid Transaction ID or Voucher Code.
	-15	Order not found.
	-16	The security token for this order is not valid.
	-17	The Transaction ID is already registered for this order.
Example	https://karsha.biz/api/finish/123456/e6163ef9da20a6a15f3856004a02ccf8	
Example Post	txid=1234567890	
Example Response	Order status.	

Get Order Status

Request URL	https://karsha.biz/api/status/<OrderID>/<Token>	
Request Post	None.	
Response	result	API call result (0 on success).
	order_url	Order information web page address.
	order_id	Order number.
	order_token	Security token for this order.
	order_date	Date of order registration.
	last_change	Date of the last change in the order.
	current_time	Current Unix timestamp of the server.
	order_status	Order status code.
	status_text	Order status text.
	email_address	Email address or Telegram username.
	timezone	Timezone passed as the “tzo” cookie.
	from_sys	Source system symbol.
	from_sys_name	Source system name.
	to_sys	Destination system symbol.
	to_sys_name	Destination system name.
	exchange_rate	Exchange rate of the order.
	rate_disp	User-friendly representation of the exchange rate.
	from_amount	Exchange amount.
	from_usd	USD equivalent of the exchange amount at the time of order.
	from_usd_now	Current USD equivalent of the exchange amount.
	to_amount	Receive amount.
	to_usd	USD equivalent of the receive amount at the time of order.
	to_usd_now	Current USD equivalent of the receive amount.
	pl_usd	Profit/loss of the exchange in USD.
	pl_usd_percent	Profit/loss percentage to the from_amount.
	pl_usd_now	Current profit/loss of the exchange in USD.
	pl_usd_now_percent	Current profit/loss percentage to the from_amount.
	to_wallet	Destination account/wallet address.
	wallet_url	URL of the information page for the destination wallet.
	wallet_disp	Link to the information page for the destination wallet.
	ex_wallet	The wallet which the customer must transfer the exchange amount to.
	payment_uri	The URI for transferring the exchange amount.
payment_qrcode	The URL to the QRCode image for the payment.	
payment_url	The URL of the webpage which redirects the customer to the payment_uri. This is useful for the systems such as Telegram which does not accept protocols other than http and https.	
txid	Destination transaction ID.	
txid_url	URL of the information page for the destination transaction.	
txid_disp	Link of the information page for the destination transaction.	
expiration	The Unix timestamp of the expiration time of the order.	
more_info	See below.	
events	See below.	
Possible Errors	-15	Order not found.
	-16	The security token for this order is not valid.

Example	https://karsha.biz/api/status/431575/e6163ef9da20a6a15f3856004a02ccf8
Example Post	None.
Example Response	<pre>{ "result":0, "order_url":"https://karsha.biz/api/status/431575/e6163ef9da20a6a15f3856004a02ccf8", "order_id":431575, "order_token":"e6163ef9da20a6a15f3856004a02ccf8", "order_date":"2018/1/13 3:01:25PM", "last_change":"2018/1/13 3:01:25PM", "current_time":1515880886, "order_status":"0", "status_text":"Waiting for payment\u2026", "email_address":"", "timezone":"-420", "from_sys":"LTC", "from_sys_name":"Litecoin", "to_sys":"BTC", "to_sys_name":"Bitcoin", "exchange_rate":"0.0143068", "rate_disp":"69.897:1", "from_amount":"0.5", "from_usd":125.3235, "from_usd_now":125.3235, "to_amount":"0.0071534", "to_usd":102.74499954, "to_usd_now":102.74499954, "pl_usd": -22.57850046, "pl_usd_percent": -18.016174508372, "pl_usd_now": -22.57850046, "pl_usd_percent_now": -18.016174508372, "to_wallet":"1NiNja1bUmhSoTXozBRBEtR8LeF9TGbZBN", "wallet_url":"https://blockchain.info/address/1NiNja1bUmhSoTXozBRBEtR8LeF9TGbZBN", "wallet_disp":"1NiNja1bUmhSoTXozBRBEtR8LeF9TGbZBN ", "ex_wallet":"LMRaYWaYjLcwm8GEnhheJMDmW2FyBiDZBk", "payment_uri":"litecoin:LMRaYWaYjLcwm8GEnhheJMDmW2FyBiDZBk?amount=0.5&message=Exchange+Order+%23431575", "payment_url":"https://karsha.biz/api/status/431575/e6163ef9da20a6a15f3856004a02ccf8/pay", "payment_qrcode":"https://chart.googleapis.com/chart?chs=500x500&cht=qr&chl=L 0&chl=litecoin%3ALYMFig341yg1wzaYLwmEkA1WLh251u8XZg%3Famount%3D0.5%26message%3D", "txid":null, "txid_url":"https://blockchain.info/tx/", "txid_disp":null, "expiration":"1515881484", "more_info":null, "events": { "1": { "date":"2018/1/13 3:01:25PM", "status":"0", "status_text":"Waiting for payment\u2026", "event_text":"Order registered." } } }</pre>

- The “more_info” parameter contains more information about the order as an array. The most important thing this parameter may include is named “tag”. This variable is set to the required “Destination Tag” for “Ripple” orders and “Payment ID” for “Monero” orders. The customer is required to include the Destination Tag or Payment ID when transferring the exchange amount to our wallet.
- The “events” parameter contains an array of all of the events occurred for that order which caused its status to change.

Order Statuses and Events

Code	Event	Status
0	Order registered.	Waiting for payment...
1	Payment procedure done.	Waiting for confirmations...
2	Payment confirmed.	Exchanging...
3	Started send procedure.	Sending...
4	Exchange procedure completed.	Completed.
5	Order blocked.	Blocked.
6	Source transaction invalid.	Invalid payment.
7	Contact support.	Please contact support.
8	Order needs further approval.	Waiting for approval...
9	Order refunded.	Refunded.
10	Order cancelled by customer.	Cancelled.
11	Order rejected.	Rejected.
12	Payment blocked.	Payment blocked.
13	Payment amount invalid.	Invalid payment amount.
14	Payment account invalid.	Invalid payment account.
15	Destination account invalid.	Invalid destination account.
16	Order expired.	Expired.
17	Status update requested.	Updating...
18	Order failed due to late transfer.	Contact support for refund.