Kaiko

MIGRATION GUIDE

OHLCV Batch

HTTP REST

Amberdata → Kaiko

2026

www.kaiko.com

1 At a glance

What this endpoint gives you. Historical OHLCV candles (open, high, low, close, volume) for up to 50 instruments of one exchange and one market in a single call, over a date range and interval you choose.

What changes for you

- **One Kaiko endpoint replaces three Amberdata endpoints.** Spot, futures and options are served by the same path; the market is set with the `class` parameter (see §3).
- **No 62-day depth cap.** Amberdata only stores the most recent 62 days and returns a `410` error for older start dates. Kaiko has full history: set `start_time` and follow the pages. Without dates, Kaiko returns the last 30 days.
- **Options: block trades are not included** in Kaiko OHLCV. Amberdata includes them in its Deribit options candles, so volumes can differ there (see §7).
- **Futures are split in two.** Amberdata's futures endpoint covers both dated and perpetual futures; Kaiko separates them into `future` and `perpetual-future`, so a mixed request becomes two calls.
- **Dates are ISO 8601 only.** `start_time` is inclusive and `end_time` exclusive, as on Amberdata.
- **Prices and volume are returned as strings**, not JSON numbers. Parse them as decimals (see §5).
- The response envelope is simpler: a top-level `data` array and a `meta` object with pagination (see §4).

Coverage & distribution

Data type: OHLCV candles built from trades

Markets: CEX spot, dated futures, perpetual futures and options

Instruments per call: 1 to 50, one exchange and one market per call (same limit as Amberdata)

Granularity: any duration from `1m` to `1d` that divides a day (e.g. `1m`, `45m`, `3h`, `1d`); default `1d`

History: full history, no maximum window (pages bounded by `page_size`); last 30 days by default; limited by your key's entitlement (Amberdata: most recent 62 days only)

Distribution: REST API

2 Endpoint & authentication

	Amberdata (today)	Kaiko (new)
Method	GET	GET
Base URL	`https://api.amberdata.com/markets`	`https://api.kaiko.io`

Path	`/spot/batch-ohlcv/{exchange}`
	`/futures/batch-ohlcv/{exchange}`
	`/options/batch-ohlcv/{exchange}`
		`/market-data/trades/batch-ohlcv`

Auth	API key header `x-api-key`	API key header `X-Api-Key` (same mechanism, new key)

The three Amberdata endpoints take exactly the same parameters and return the same fields; only the market segment in the path differs. On Kaiko, exchange and market move from the path to query parameters.

Kaiko API family: New API grammar

This endpoint uses Kaiko's new `market-data` grammar: every parameter is a query parameter and responses share the `data` + `meta` envelope. Kaiko's Classic (versioned) endpoints, such as Trades, use a different URL structure and envelope.

3 Request parameters

All Kaiko parameters are query parameters. Required: `exchange`, `class`, `instrument`. Optional: `start_time`, `end_time`, `interval`, `sort`, `page_size`.

Amberdata param	Kaiko param	Change	Notes
`spot` | `futures` | `options` (path)	`class`	RENAMED	Required. Values `spot`, `future`, `perpetual-future`, `option`. Amberdata `futures` maps to both `future` and `perpetual-future`.
`exchange` (path, required)	`exchange`	RENAMED	Required, one exchange per call. Kaiko exchange code (e.g. `binc`, `drbt`); see §6.
`instruments` (required)	`instrument`	RENAMED	Required. Comma-separated list, 1 to 50 instruments on both sides. Kaiko instrument codes (see §6). The list is validated all or nothing: an unknown code returns `404 unknown_instrument` naming it; a code outside your licence returns `403 not_entitled`.
`startDate` (optional)	`start_time`	RENAMED	Inclusive on both sides. Amberdata accepts seconds, milliseconds or ISO 8601 and must stay within the last 62 days; Kaiko takes ISO 8601 UTC with at most millisecond precision (e.g. `2025-01-01T00:00:00.000Z`; finer precision returns `400`). Default: `end_time` minus 30 days. The window is clamped to the instruments' trading range (earliest listing to latest delisting among them). No maximum window. History beyond your key's entitlement returns `403 history_out_of_entitlement`, including for the default window.
`endDate` (optional)	`end_time`	RENAMED	**Exclusive on both sides.** ISO 8601 UTC, millisecond precision at most. Default: now.
`timeInterval` (optional)	`interval`	RENAMED	Amberdata: `minutes`, `hours`, `days` (default). Kaiko: any duration from `1m` to `1d` that divides a day, in whole minutes below one hour and whole hours from one hour (e.g. `1m`, `45m`, `3h`, `1d`); default `1d`. Other values (`90m`, `1h30m`) return `400`. Equivalents: `1m`, `1h`, `1d`.
`timeFormat` (optional)	—	REMOVED	Amberdata can return milliseconds (default), ISO 8601 or human-readable timestamps. Kaiko always returns Unix milliseconds.
`api-version` (header, optional)	`api_version`	RENAMED	A header on Amberdata; a query parameter on Kaiko, e.g. `2026-10-01`.

Amberdata param	Kaiko param	Change	Notes
`Accept-Encoding` (header, required)	`Accept-Encoding`	IDENTICAL	Required by Amberdata (`gzip, deflate, br`); supported by Kaiko.
—	`page_size`	NEW	Optional. **Counts time buckets, not rows:** a page holds up to `page_size` buckets for every requested instrument, i.e. up to `page_size` × number of instruments rows. An instrument is never split across pages within a bucket.
—	`sort`	NEW	By bucket `timestamp` : `desc` (default, newest first) or `asc` ; within a bucket, by `instrument` ascending.

Error codes

Common to Kaiko's New API grammar endpoints:

- `400` : invalid parameter (value, format or precision not accepted).
- `403 not_entitled` : the requested asset or instrument is outside your licence. Lists are authorised all or nothing.
- `403 history_out_of_entitlement` : the time window goes beyond your key's history entitlement, including the default window when no dates are sent.
- `404 unknown_instrument` : a code that is not an instrument of the requested `class` / exchange; the response names it.

4 Response envelope & metadata

The fields around the data, the wrapper your parser reads before reaching the numbers. This envelope is **identical on every Amberdata endpoint**.

Amberdata field	Kaiko field	Change	Notes
`status`	—	REMOVED	HTTP-style status integer (200). Not in the Kaiko body; rely on the HTTP status code.
`title`	—	REMOVED	"OK" label, no direct Kaiko equivalent.
`description`	—	REMOVED	Free-text status description.
`payload.data`	`data`	RENAMED	**Array** holding the candles (see §5), now at the top level.
`payload.metadata`	`meta`	RENAMED	Metadata object, after `data` .
`payload.metadata.api-version`	`meta.api_version`	RENAMED	Date version of the API used, e.g. `2023-09-30` on Amberdata, `2026-10-01` on Kaiko.
—	`meta.count`	NEW	Number of items returned in `data` on this page.

Amberdata field	Kaiko field	Change	Notes
`payload.metadata.next`	`meta.next_url`	RENAMED	Full URL of the next page. Call it as-is until it is no longer returned; it moves the time bound past the last bucket of the page (`end_time` with `desc` , `start_time` with `asc`). Rows are unique on (`instrument` , `timestamp`).
—	`meta.url`	NEW	The query as requested, with every parameter it carries (exchange, market, instruments, dates...).

5 Response - data fields

One row per instrument and candle. Fields are the same for every market.

Amberdata field	Kaiko field	Type	Change	Notes
`instrument`	`instrument`	string	RENAMED	Same field name, new code format (e.g. `btc_usdt` → `btc-usdt` for spot). See §6.
`exchangeTimestamp`	`timestamp`	integer (ms)	RENAMED	Unix milliseconds on both sides. Kaiko stamps each candle with its **open** time (start of the bucket).
`open`	`open`	number → string	RENAMED	Same name; returned as a decimal string.
`high`	`high`	number → string	RENAMED	Same name; returned as a decimal string.
`low`	`low`	number → string	RENAMED	Same name; returned as a decimal string.
`close`	`close`	number → string	RENAMED	Same name; returned as a decimal string.
`volume`	`volume`	number → string	RENAMED	Same name; returned as a decimal string.

Exchange and market are carried by the request

Rows carry only `instrument` . Each call targets a single exchange and a single market, both echoed in `meta.url` , so every row of a response belongs to them. This matters on Kaiko, where a spot pair and a perpetual can share the same code (e.g. `btc-usd`).

6 Exchange & instrument names

Kaiko identifies venues and instruments with its own normalized codes, which differ from Amberdata's names. Codes can also differ by market for the same venue (e.g. Binance spot and options).

Reference

The mapping rules and the full code lists apply to every endpoint and are described in the **Exchange, Asset & Instrument Mapping** migration guide (`exchange-instrument-asset-codes.pdf`).

7 Will your values change?

Short answer

Candles should be close but may differ slightly, because each provider builds them from its own trade collection. **On options, Kaiko excludes block trades**: on Deribit options, where Amberdata includes them, expect differences on the candles concerned.

- **Trade capture.** A trade missing or corrected on one side changes that candle's volume, and possibly its high or low.
- **Block trades (options). Kaiko options OHLCV does not include block trades.** Amberdata includes them in its Deribit options OHLCV, so volume, and possibly high and low, will differ on candles where block trades occurred.
- **Number representation.** Kaiko returns decimal strings, which keep the exact digits; Amberdata returns JSON numbers (e.g. `77734` for a close of 77734.00). Compare as decimals, not as text.
- **Empty buckets.** When an instrument did not trade in a bucket, Kaiko returns the row with `null` prices and a `volume` of `"0"`; an instrument outside its own trading range within the window also gets empty candles.

8 Before / after example

Request

Amberdata

```
GET https://api.amberdata.com/markets
    /spot/batch-ohlcv/binance
    ?instruments=btc_usdt,eth_usdt
    &timeInterval=days
x-api-key: <your key>
```

Kaiko

```
GET https://api.kaiko.io
    /market-data/trades/batch-ohlcv
    ?exchange=binc
    &class=spot
    &instrument=btc-usdt,eth-usdt
    &interval=1d
X-Api-Key: <your key>
```

Response

Real samples. The two calls cover different pairs and dates, so values are not comparable.

Amberdata


```
{
  "status": 200,
  "title": "OK",
  "description": "Successful request",
  "payload": {
    "metadata": {
      "next": null,
      "api-version": "2023-09-30"
    },
    "data": [
      {
        "instrument": "btc_usdt",
        "exchangeTimestamp": 1787443200000,
        "open": 77074.94,
        "high": 78052.85,
        "low": 75545.67,
        "close": 77734,
        "volume": 15367.23185
      },
      ...
    ]
  }
}
```


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```
{
  "data": [
    {
      "instrument": "btc-usd",
      "timestamp": 1792771200000,
      "open": "81584.8",
      "high": "81642.1",
      "low": "81400",
      "close": "81421.8",
      "volume": "44.209692559999944"
    },
    ...
  ],
  "meta": {
    "api_version": "2026-10-01",
    "count": 2,
    "next_url": "...",
    "url": "..."
  }
}
```