Kaiko

MIGRATION GUIDE

Put/Call Trades Distribution

Amberdata → Kaiko

2026

www.kaiko.com

1 At a glance

What this endpoint gives you: for the options of one underlying on one exchange, this endpoint sums the trades of a window into four buckets, calls bought, calls sold, puts bought and puts sold, each in number of contracts and in USD premium. The split is given twice: once by Kaiko's own reading of who initiated each trade, and once by the side the venue reported. That is sixteen numbers in one row, the classic sentiment view of the options flow: heavy call buying reads as bullish demand, heavy put buying as hedging demand, and the premium view weights each by the dollars actually spent.

What changes for you

- You will call a new endpoint, `/analytics/trades-flow/put-call-distribution`, using your Kaiko API key in the `X-Api-Key` header (§2).
- The underlying is now expressed with lowercase parameters: `exchange=deribit` becomes `exchange=drbt` and `currency=BTC` becomes `base_asset=btc`. The quote currency is optional and defaults to `usd`, so `base_asset=btc` alone sums the inverse options, exactly as `currency=BTC` did. A linear book is selected with `quote_asset=usdc`, for example `currency=BTC_USDC` becomes `base_asset=btc` with `quote_asset=usdc` (§3, §6).
- Dates are now full timestamps with a time zone: `startDate` and `endDate` become `start_time` and `end_time`, for example `2026-10-26T00:00:00.000Z`. The window itself stays the same, `[start, end)`, with the last 24 hours as the default and no maximum length (§3).
- The filters are renamed: `expiration` becomes `expiry` (a full timestamp), `strike` is unchanged, and `blockTradeId` splits into `is_block_trade` (`true` / `false`) and `block_trade_id` (an id). `timeFormat` is removed (§3).
- Field names follow one pattern: `callsContractsBought` becomes `call_contracts_bought`, and `callsContractsBoughtExchangeDirection` becomes `exchange_call_contracts_bought`. The row now also carries `exchange`, `base_asset` and `quote_asset` (§5).
- The sums are computed the same way, in contracts and in USD, so there is no unit to convert: for the same options and the same window, the values are directly comparable (§7).
- A pair the exchange does not list is now an error: Kaiko returns a 404, not a row of zeros (§4).

Coverage & distribution

Data type: One row per request, the distribution of the window (not a time series)

Metrics: 16 values: calls and puts × bought and sold × contracts and USD premium × Kaiko direction and venue direction

Exchange: Deribit (`drbt`), inverse and linear options. Our teams are working to extend this coverage to further exchanges

Underlyings: Every option listed on the exchange, selected by base asset and quote asset (§6)

Range: Any window, with the last 24 hours as the default

History: From 1 June 2021

Distribution: REST API

2 Endpoint & authentication

	Amberdata (today)	Kaiko (new)
Method	GET	GET
Base URL	`https://api.amberdata.com`	`https://api.kaiko.io`
Path	`/markets/derivatives/analytics/trades-flow/put-call-distribution`	`/analytics/trades-flow/put-call-distribution`
Auth	API key header `x-api-key`	API key header `X-Api-Key` (your Kaiko key)

Header names are not case-sensitive, so `x-api-key` and `X-Api-Key` refer to the same header: only the key itself changes. **Versioning:** Amberdata reported its version in `payload.metadata.api-version` (`2023-09-30`). Kaiko accepts an optional `api_version` query parameter (the default and current version is `2026-10-01`) and returns it in `meta.api_version`.

3 Request parameters

Amberdata param	Kaiko param	Change	Notes
`exchange` (required)	`exchange` (required)	RENAMED	The name is unchanged, but the value is now the Kaiko code (§6): `deribit` → `drbt`. Lowercase only: `DRBT` returns a 400 error (Amberdata accepted any case).
`currency` (required)	`base_asset` (required) + `quote_asset` (optional, default usd)	RENAMED	`BTC` becomes `base_asset=btc` : `quote_asset` defaults to `usd` , the inverse options, as on Amberdata. `BTC_USDC` becomes `base_asset=btc` and `quote_asset=usdc` (§6). Lowercase only.
`startDate` (optional)	`start_time` (optional)	RENAMED	**Inclusive**, as before. Please use an RFC 3339 timestamp with a time zone, for example `2026-10-26T00:00:00.000Z` (seconds or milliseconds, at most three fractional digits). A date on its own or a time without zone, which Amberdata accepted, returns a 400 error.
`endDate` (optional)	`end_time` (optional)	RENAMED	**Exclusive**, as before: the window covers `[start_time, end_time)`. The same format rule as for `start_time` applies.
`expiration` (optional)	`expiry` (optional)	RENAMED	An exact match on the option's expiry, as a full timestamp with a time zone: `2026-11-27T08:00:00Z` (Deribit options expire at 08:00 UTC). A date on its own returns a 400 error.
`strike` (optional)	`strike` (optional)	IDENTICAL	An exact match, for example `80000` . The value must be positive.
`blockTradeId` (optional)	`is_block_trade` + `block_trade_id` (optional)	RENAMED	One parameter becomes two: `true` becomes `is_block_trade=true` , `false` becomes `is_block_trade=false` , and an id becomes `block_trade_id=BLOCK-303828` .
`timeFormat` (optional)	None	REMOVED	The row carries no timestamp, so this parameter had no effect. Sending it returns a 400 error: you can simply remove it from your requests.

Amberdata param	Kaiko param	Change	Notes
None	`api_version` (optional)	NEW	Lets you pin the response format. The default is `2026-10-01`.

Defaults and limits

- **Boundary, the same as Amberdata:** the window is `[start_time, end_time)`. A trade at `start_time` is included, a trade at `end_time` is not.
- **No dates:** if you include no dates, the last 24 hours up to now are summed, exactly as on Amberdata.
- **One date only:** if you only provide `start_time`, the window runs from that time up to now. If you only provide `end_time`, the 24 hours before it are summed. Amberdata required both dates or none.
- **No maximum:** the window can be as long as you need, for example a full year. The response is always one row, whatever the length of the window, and it is never paginated.
- **Checks:** the start must be before the end, otherwise Kaiko returns a 400 error (Amberdata returned a row of zeros).
- **Filters:** they combine, so a trade is summed only when it passes every filter sent, for example the block trades of one expiry. A filter that matches nothing returns a row of zeros, as on Amberdata. `is_block_trade=false` cannot be combined with `block_trade_id`: that returns a 400 error.
- **Parameter names:** Kaiko rejects a parameter it does not know with a 400 error (for example `expiration: unknown parameter`), so please rename every Amberdata parameter, `currency` and `timeFormat` included.

4 Response envelope & metadata

These are the fields around the data, in other words the wrapper your parser reads before reaching the numbers. This envelope is **identical on every Amberdata endpoint**.

Amberdata field	Kaiko field	Change	Notes
`status`	None	REMOVED	Please use the HTTP status code (200) instead.
`title`	None	REMOVED	There is no equivalent on success.
`description`	None	REMOVED	There is no equivalent on success.
`payload.data`	`data`	RENAMED	Now at the top level. An **array** with exactly one row.
`payload.metadata`	`meta`	RENAMED	Now at the top level.
`api-version`	`api_version`	RENAMED	`2026-10-01` (Amberdata: `2023-09-30`).
None	`count`	NEW	Always `1`.
None	`next_url`	NEW	Always `null`, since there is a single row.
None	`url`	NEW	Your request URL, including `api_version`.

On Amberdata, `api-version` sits inside `payload.metadata`. On Kaiko, `api_version`, `count`, `next_url` and `url` all sit inside `meta`.

Errors and empty results

- **Nothing traded in the window,** or a filter that keeps nothing: both APIs return a 200 response with the row and every value at `0`. The row is never empty and the values are never `null`.
- **Underlying not found** (a misspelled `base_asset` or `quote_asset`, or a pair the exchange does not list): Kaiko returns a 404 error with the code `unknown_instrument` and a detail naming the pair, where Amberdata returned a row of zeros. An `exchange` outside the served list returns a 400 error on Kaiko, naming the allowed values.
- **Uppercase values:** Amberdata accepted any case. Kaiko returns a 400 error, for example for `BTC` or `DRBT`.
- **Start equal to or after end:** Kaiko returns a 400 error, where Amberdata returned a row of zeros.
- **Missing or invalid key:** Kaiko returns a 401 error with the code `missing_api_key` or `invalid_api_key`.
- **Missing, unknown or invalid parameter:** both APIs return a 400 error. Kaiko errors are `application/problem+json` (RFC 9457) bodies that include `status`, `title`, a `detail` message naming the parameter, and the code `invalid_parameter`.

5 Response data fields

The sixteen values keep their meaning and their units. Kaiko names them with one pattern, `{call|put}_{contracts|premium_usd}_{bought|sold}`: the fields without a prefix are the split by Kaiko's direction (Amberdata's fields without a suffix, its `amberdataDirection`), and the `exchange_` prefix is the split by the venue's reported side (Amberdata's `...ExchangeDirection` fields).

Amberdata field	Kaiko field	Type	Change

None	`exchange`
	`base_asset`
	`quote_asset`
		string	NEW

`callsContractsBought` `callsContractsSold`	`call_contracts_bought` `call_contracts_sold`	number	RENAMED
`putContractsBought` `putContractsSold`	`put_contracts_bought` `put_contracts_sold`	number	RENAMED
`callsPremiumBought` `callsPremiumSold`	`call_premium_usd_bought` `call_premium_usd_sold`	number	RENAMED
`putPremiumBought` `putPremiumSold`	`put_premium_usd_bought` `put_premium_usd_sold`	number	RENAMED
`callsContractsBoughtExchangeDirection` `callsContractsSoldExchangeDirection`	`exchange_call_contracts_bought` `exchange_call_contracts_sold`	number	RENAMED
`putContractsBoughtExchangeDirection` `putContractsSoldExchangeDirection`	`exchange_put_contracts_bought` `exchange_put_contracts_sold`	number	RENAMED
`callsPremiumBoughtExchangeDirection` `callsPremiumSoldExchangeDirection`	`exchange_call_premium_usd_bought` `exchange_call_premium_usd_sold`	number	RENAMED

Amberdata field	Kaiko field	Type	Change
`putPremiumBoughtExchangeDirection` `putPremiumSoldExchangeDirection`	`exchange_put_premium_usd_bought` `exchange_put_premium_usd_sold`	number	RENAMED

- **exchange, base_asset, quote_asset** echo your request (`drbt` , `btc` , `usd`). `quote_asset` is `usd` when you did not send it.
- **contracts** is the sum of the trade sizes in contracts, and **premium_usd** the sum of each trade's USD price times its size: the same two sums as on Amberdata, in the same units, so there is nothing to convert. Amberdata mixed `calls...` in the plural with `put...` in the singular; Kaiko uses the singular for both, `call_...` and `put_...` .
- **The buckets without a prefix** split the trades by Kaiko's verdict on who initiated each trade, read from the top of book, the implied volatilities and the size around it, the same role as Amberdata's `amberdataDirection` . **exchange_** buckets split the same trades by the taker side the venue reported. The two halves cover the same trades, so they differ only where the two directions disagree.
- **Zeros:** every value is a number. A bucket with no trade is a real `0` , never `null` , on both sides.

6 Exchange & venue names

For this endpoint, the venue is an **options exchange**. Please map the identifier you send and receive as follows:

Amberdata name	Kaiko code	Exchange
deribit	drbt	Deribit

The underlying follows the same idea. Amberdata's `currency` named the book in one word, while Kaiko separates the base asset from the currency the options are quoted and settled in: `quote_asset=usd` , the default, selects the inverse options (quoted in the base asset, on a USD index) and `quote_asset=usdc` the linear ones. For example:

Amberdata `currency`	Kaiko `base_asset`	Kaiko `quote_asset`	Options summed
BTC	btc	usd (default)	Inverse, settled in BTC
ETH	eth	usd (default)	Inverse, settled in ETH
BTC_USDC	btc	usdc	Linear, settled in USDC
ETH_USDC	eth	usdc	Linear, settled in USDC
SOL_USDC	sol	usdc	Linear, settled in USDC
XRP_USDC	xrp	usdc	Linear, settled in USDC

Every option listed on the exchange is served, so any other underlying follows the same rule. A pair the exchange does not list returns a 404 error (§4). Deribit is the exchange served today, and our teams are working to extend this coverage to further exchanges. History on Kaiko starts on 1 June 2021.

7 Will your values change?

Short answer

The sums are the same: contracts and USD premium of the same trades, split the same way, with no unit to convert. For the same options and the same window, the values are directly comparable. What changes is the naming and the time format.

- **Same computation:** on both sides, contracts are the sum of the trade sizes and the premium is the sum of each trade's USD price times its size, over the trades of the window that pass the filters.
- **Same directions:** the `exchange_` half uses the taker side the venue reported, as Amberdata's `...ExchangeDirection` fields did. The half without a prefix follows the same approach as Amberdata's `amberdataDirection`: it reads the aggressor from the top of book before the trade (price against bid, ask, mid and mark, and the implied volatilities), it treats the legs of a block trade together, and it falls back to the venue's side when the reading is undecided.
- **Same options covered:** `base_asset=btc` alone sums the inverse options, as Amberdata's `currency=BTC` did, and `quote_asset=usdc` the linear ones, as `currency=BTC_USDC` did (§6).
- **Units:** contracts and USD on both sides. There is no implied volatility in this row, so nothing is rescaled.
- **Default window and limits:** the last 24 hours without dates, as on Amberdata, and no maximum length (§3).
- **History:** Kaiko's history starts on 1 June 2021. A window before that date returns a row of zeros.

8 Before / after example

Request (the block trades of the 27 October 2026 expiry, over one day)

Amberdata

```
GET https://api.amberdata.com
    /markets/derivatives/analytics
    /trades-flow/put-call-distribution
    ?exchange=deribit
    &currency=BTC
    &startDate=2026-10-26T00:00:00
    &endDate=2026-10-27T00:00:00
    &blockTradeId=true
    &expiration=2026-10-27T08:00:00
x-api-key: <your-amberdata-key>
```

Kaiko

```
GET https://api.kaiko.io
    /analytics/trades-flow/put-call-distribution
    ?exchange=drbt
    &base_asset=btc
    &start_time=2026-10-26T00:00:00.000Z
    &end_time=2026-10-27T00:00:00.000Z
    &is_block_trade=true
    &expiry=2026-10-27T08:00:00Z
X-Api-Key: <your-kaiko-key>
```

Response (real responses for the same request; the fields are regrouped in the same order on both sides)

Amberdata


```
{
  "status": 200,
  "title": "OK",
  "description": "Successful request",
  "payload": {
    "data": [ {
      "callsContractsBought": 175,
      "callsContractsSold": 117.5,
      "putContractsBought": 165,
      "putContractsSold": 85,
      "callsPremiumBought": 61570.77295,
      "callsPremiumSold": 25891.0814625,
      "putPremiumBought": 45101.571425,
      "putPremiumSold": 48746.182875,
      "callsContractsBoughtExchangeDirection":
        175,
      "callsContractsSoldExchangeDirection":
        117.5,
      "putContractsBoughtExchangeDirection":
        165,
      "putContractsSoldExchangeDirection":
        85,
      "callsPremiumBoughtExchangeDirection":
        61570.77295,
      "callsPremiumSoldExchangeDirection":
        25891.0814625,
      "putPremiumBoughtExchangeDirection":
        45101.571425,
      "putPremiumSoldExchangeDirection":
        48746.182875
    } ],
    "metadata": {
      "api-version": "2023-09-30"
    }
  }
}
```


Kaiko


```
{
  "data": [ {
    "exchange": "drbt",
    "base_asset": "btc",
    "quote_asset": "usd",
    "call_contracts_bought": 175,
    "call_contracts_sold": 117.5,
    "put_contracts_bought": 165,
    "put_contracts_sold": 85,
    "call_premium_usd_bought":
      61570.77295,
    "call_premium_usd_sold":
      25891.0814625,
    "put_premium_usd_bought":
      45101.571425,
    "put_premium_usd_sold":
      48746.182875,
    "exchange_call_contracts_bought": 175,
    "exchange_call_contracts_sold": 117.5,
    "exchange_put_contracts_bought": 165,
    "exchange_put_contracts_sold": 85,
    "exchange_call_premium_usd_bought":
      61570.77295,
    "exchange_call_premium_usd_sold":
      25891.0814625,
    "exchange_put_premium_usd_bought":
      45101.571425,
    "exchange_put_premium_usd_sold":
      48746.182875
  } ],
  "meta": {
    "api_version": "2026-10-01",
    "count": 1,
    "next_url": null,
    "url": "https://api.kaiko.io/analytics/trades-
flow/put-call-distribution?
exchange=drbt&base_asset=btc&start_time=2026-10-26
T00%3A00%3A00.000Z&end_time=2026-10-27T00%3A00%3A0
0.000Z&is_block_trade=true&expiry=2026-10-27T08%3A
00%3A00Z&api_version=2026-10-01"
  }
}
```