Kaiko

MIGRATION GUIDE

TradFi – Volatility – Level 1 Quotes

HTTP REST

Amberdata → Kaiko

2026

www.kaiko.com

1 At a glance

What this endpoint gives you. The "Level 1" option chain of an underlying: bid, ask, sizes, mark price, implied volatilities and Greeks, with index price and rate, per time bucket.

Same source on both sides: SpiderRock

Amberdata and Kaiko both source TradFi options data (ETFs and crypto-related equities such as IBIT, COIN, MSTR) from SpiderRock, with unchanged business logic. Only the API shape changes; values are expected to be identical.

What changes for you

- **Snake_case field names** (`markIv` → `mark_iv`); values stay JSON numbers and IVs stay in percent.
- **Coarser finest granularity:** Amberdata goes down to 1 minute; Kaiko buckets are 5 minutes (`5m`, default), `1h` or `1d`.
- **Short-dated contracts are excluded by default:** `start_days_to_expiry` defaults to 1 on Kaiko. Set it to 0 to include same-day expiries.
- **Days-to-expiry upper bound becomes exclusive:** Amberdata `maxDaysToExpiration` is inclusive; Kaiko `end_days_to_expiry` is exclusive (use max + 1).
- `underlyingPrice` **becomes** `underlying_rate`: the field holds a rate (e.g. `0.05056`), and Kaiko names it accordingly.
- `putCall` **becomes** `option_type` (`C` / `P` → `call` / `put`). USD-converted volume and open interest are not returned.

Coverage & distribution

Data type: Option chain quotes, IVs and Greeks

Underlyings: 23 ETFs and crypto-related equities (see §6)

Granularity: Kaiko `5m` (max window 1 h), `1h` (max 24 h), `1d`. Amberdata: 1 minute (max 60) or 1 hour (max 24)

Trading hours: US session, 14:30–21:00 UTC

Distribution: REST API

2 Endpoint & authentication

	Amberdata (today)	Kaiko (new)
Method	GET	GET
Base URL	`https://api.amberdata.com/markets/derivatives`	`https://api.kaiko.io`
Path	`/analytics/volatility/level-1-quotes/tradfi`	`/analytics/volatility/tradfi-level-1-quotes`
Auth	API key header `x-api-key`	API key header `X-Api-Key` (same mechanism, new key)

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. Without dates, both providers return the most recent option chain.

Amberdata param	Kaiko param	Change	Notes
`currency` (required)	`base_asset`	RENAMED	**Required on both sides.** Underlying ticker, lower case on Kaiko (`IBIT` → `ibit`); see §6.
—	`quote_asset`	NEW	Optional; `usd` only (default).
`instrument` (optional)	`instrument`	IDENTICAL	Single contract, native format (e.g. `IBIT-30OCT26-47.0-P`).
`startDate` (optional)	`start_time`	RENAMED	Inclusive on both sides. Kaiko: ISO 8601 UTC.
`endDate` (optional)	`end_time`	RENAMED	Exclusive on both sides. Kaiko: ISO 8601 UTC.
`timeInterval` (optional)	`interval`	RENAMED	`minute` / `hour` / `day` → `5m` (default) / `1h` / `1d`. **No 1-minute buckets on Kaiko.** Max window: 1 h at `5m`, 24 h at `1h`.
`expiration` (optional)	`expiry`	RENAMED	`YYYY-MM-DD` on both sides.
`strike` (optional)	`strike`	IDENTICAL	Exact match (e.g. `46.5`; decimals accepted on Kaiko).
`minStrike`, `maxStrike`	`min_strike`, `max_strike`	RENAMED	Strike range.
`putCall` (optional)	`option_type`	RENAMED	**Values change:** `C` / `P` → `call` / `put`.
`isAtm` (optional)	`is_atm`	RENAMED	`true` / `false`.
`minDaysToExpiration`	`start_days_to_expiry`	RENAMED	Inclusive on both sides. **Kaiko default 1**: same-day expiries are excluded unless set to 0.
`maxDaysToExpiration`	`end_days_to_expiry`	RENAMED	**Inclusive on Amberdata, exclusive on Kaiko**: pass Amberdata value + 1.
—	`sort`	NEW	`asc` or `desc` (default).
—	`page_size`	NEW	Default 1000, maximum 10000. Follow `meta.next_url`.
`timeFormat` (optional)	—	REMOVED	Kaiko always returns ISO 8601.
`api-version` (header, optional)	`api_version`	RENAMED	A query parameter on Kaiko, e.g. `2026-10-01`.

Amberdata param	Kaiko param	Change	Notes
`Accept-Encoding` (header)	`Accept-Encoding`	IDENTICAL	Supported by Kaiko.

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 rows (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.
`payload.metadata.next`	`meta.next_url`	RENAMED	Full URL of the next page when results are paginated (a cursor URL on Amberdata). Call it as-is until it is no longer returned.
—	`meta.url`	NEW	The query as requested, with every parameter it carries.

5 Response - data fields

One row per contract and time bucket. Values are JSON numbers on both sides; IVs are in percent on both sides.

Amberdata field	Kaiko field	Change	Notes
`instrument`	`instrument`	IDENTICAL	Native option symbol.
`instrumentNormalized`	—	REMOVED	Amberdata symbol with `TRADFI-` prefix.
`currency`, `exchange`	—	REMOVED	Underlying is in the request (`base_asset`); `exchange` was always `tradfi`.
`timestamp`	`value_time`	RENAMED	Start of the time bucket, ISO 8601.
`exchangeTimestamp`	`exchange_time`	RENAMED	Exchange quote time, ISO 8601 (nanosecond digits on Kaiko).
`expirationTimestamp`	`expiry`	RENAMED	ISO 8601.
`putCall`	`option_type`	RENAMED	`C` / `P` → `call` / `put`.
`strike`, `multiplier`	`strike`, `multiplier`	IDENTICAL	
`bid`, `ask`	`bid`, `ask`	IDENTICAL	Best bid and ask; `null` when absent.
`bidVolume`, `askVolume`	`bid_size`, `ask_size`	RENAMED	Size at the best bid / ask.
`bidIv`, `askIv`, `markIv`	`bid_iv`, `ask_iv`, `mark_iv`	RENAMED	Implied volatilities, in percent on both sides.
`markPrice`	`mark_price`	RENAMED	Mark price.
`delta`, `gamma`, `theta`, `vega`, `rho`	same names	IDENTICAL	Greeks.
`indexPrice`	`index_price`	RENAMED	Underlying (ETF / equity) price.
`underlyingPrice`	`underlying_rate`	RENAMED	**Name change only:** the field is a rate (e.g. `0.05056` on Amberdata, `0.04511` on Kaiko), not a price.
`isAtm`	`is_atm`	RENAMED	At-the-money flag.
`isCarryForward`	`is_carry_forward`	RENAMED	The quote was carried forward from a previous bucket.
`isExchangeProvidedGreeks`	`is_exchange_provided_greeks`	RENAMED	Greeks provided by the source rather than computed.
`openInterest`, `volume`	`open_interest`, `volume`	RENAMED	Same meaning; `openInterest` renamed to `open_interest`.
`openInterestUSD`, `volumeUSD`	—	REMOVED	No USD-converted values on Kaiko.

6 Underlyings & instrument names

TradFi coverage is a fixed list of **23 underlyings** (ETFs and crypto-related equities). Kaiko takes the ticker in lower case in `base_asset`; Amberdata uses it in upper case in `currency`.

Amberdata	Kaiko	Amberdata	Kaiko	Amberdata	Kaiko
`ARKB`	`arkb`	`BITB`	`bitb`	`BITO`	`bito`
`BITQ`	`bitq`	`BITX`	`bitx`	`BMNR`	`bmnr`
`COIN`	`coin`	`CRCL`	`crcl`	`EETH`	`eeth`
`ETHA`	`etha`	`ETHE`	`ethe`	`ETHU`	`ethu`
`FETH`	`feth`	`FBTC`	`fbtc`	`GBTC`	`gbtc`
`GME`	`gme`	`IBIT`	`ibit`	`MARA`	`mara`
`MSTR`	`mstr`	`MSTU`	`mstu`	`MSTY`	`msty`
`SATO`	`sato`	`SBET`	`sbet`		

Option symbols keep the exchange-native format on Kaiko, `<TICKER>-<DDMMMYY>-<strike>-<C|P>` (e.g. `IBIT-30OCT26-47.0-P`): the same as Amberdata's native symbol, without the `TRADFI-` prefix. **Integer strikes carry one decimal on both sides** (e.g. `IBIT-28OCT26-46.0-C`); Amberdata's documentation examples omit it, its responses include it.

7 Will your values change?

Short answer

Same SpiderRock quotes, IVs and Greeks on both sides. Differences come only from request defaults and bucketing.

- **Default contract set.** Kaiko excludes contracts expiring within a day unless `start_days_to_expiry`=0.
- **Granularity.** 1-minute Amberdata series have no Kaiko equivalent; the finest Kaiko bucket is 5 minutes.
- **Days-to-expiry bound.** Kaiko `end_days_to_expiry` is exclusive.

8 Before / after example

Request

Amberdata

```
GET https://api.amberdata.com/markets/derivatives
    /analytics/volatility/level-1-quotes/tradfi
    ?currency=IBIT
x-api-key: <your key>
```

Kaiko

```
GET https://api.kaiko.io
    /analytics/volatility/tradfi-level-1-quotes
    ?base_asset=ibit
X-Api-Key: <your key>
```

Response

Amberdata: example from its documentation. Kaiko: real sample. Different dates, so contracts and values differ.

Amberdata


```
{
  "status": 200,
  "title": "OK",
  "description": "Successful request",
  "payload": {
    "data": [
      {
        "ask": 0.05,
        "askIv": 88.46,
        "askVolume": null,
        "bid": null,
        "bidIv": null,
        "bidVolume": null,
        "currency": "IBIT",
        "delta": -0.00874,
        "exchange": "tradfi",
        "exchangeTimestamp":
"2024-11-19T17:21:07.138Z",
        "expirationTimestamp":
"2024-12-20T00:00:00.000Z",
        "gamma": 0.00177,
        "indexPrice": 52.735,
        "instrument": "IBIT-20DEC24-30-P",
        "instrumentNormalized": "TRADFI-
IBIT-20DEC24-30-P",
        "isAtm": false,
        "isCarryForward": false,
        "isExchangeProvidedGreeks": true,
        "markIv": 86.44,
        "markPrice": 0.04253,
        "multiplier": 100,
        "openInterest": null,
        "openInterestUSD": null,
        "putCall": "P",
        "rho": -0.00044,
        "strike": 30,
        "theta": -0.00693,
        "timestamp": "2024-11-19T17:20:00.000Z",
        "underlyingPrice": 0.05056,
        "vega": 0.00368,
        "volume": null,
        "volumeUSD": null
      },
      ...
    ]
  }
}
```


Kaiko


```
{
  "data": [
    {
      "ask": 0.01,
      "ask_iv": 485.285,
      "ask_size": null,
      "bid": null,
      "bid_iv": null,
      "bid_size": null,
      "delta": -0.00022,
      "exchange_time":
"2026-10-30T19:58:55.800359000Z",
      "expiry": "2026-11-02T00:00:00.000Z",
      "gamma": 0.00018,
      "index_price": 43.375,
      "instrument": "IBIT-02NOV26-30.0-P",
      "is_atm": false,
      "is_carry_forward": false,
      "is_exchange_provided_greeks": true,
      "mark_iv": 137.392,
      "mark_price": 0.00026,
      "multiplier": 100,
      "open_interest": null,
      "option_type": "put",
      "rho": 0,
      "strike": 30,
      "theta": -0.00026,
      "underlying_rate": 0.04511,
      "value_time": "2026-10-30T20:00:00.000Z",
      "vega": 0.00003,
      "volume": null
    },
    ...
  ],
  "meta": {
    "api_version": "2026-10-01",
    "count": 1000,
    "next_url": "https://api.kaiko.io/analytics/
volatility/tradfi-level-1-quotes?
after_instrument=...",
    "url": "https://api.kaiko.io/analytics/
volatility/tradfi-level-1-quotes?
base_asset=ibit&..."
  }
}
```