C100 Index Methodology

Version 2.0 · Effective January 6, 2020 (base date) · All times UTC

The C100 is a rules-based index of the 100 largest eligible crypto assets, weighted by market capitalization with single-asset and aggregate caps modeled on the Nasdaq-100. This document describes every rule the index engine applies. The engine is open source, and these rules are its configuration.

Informational index only. Not investment advice. Not an investable product.

1. Index family

Index	Constituents	Weighting	Notes
C100	up to 100	Modified market cap	Flagship
C25	25	Modified market cap	Buffer: members stay to rank 30, newcomers enter from rank 22
C100-EW	up to 100	Equal weight	Same membership rules as C100, no caps
C100-exBTC	up to 100	Modified market cap	Bitcoin excluded

All variants share the same data, eligibility rules, schedule and calculation.

2. Data

- **Source.** CoinMarketCap point-in-time daily ranked listings (market cap, price, 24h volume, rank, number of trading pairs and tags for every listed asset on each day) and daily price history.
- **Point in time.** Every selection uses only data that existed on the selection date. Assets that were later delisted, collapsed or migrated stay in the history. Terra (LUNA) was a top-10 C100 constituent with a 4.1% weight at the May 2, 2022 rebalance, days before its collapse, and the index absorbed that loss.
- **Timestamp.** A daily value dated D is the value at 00:00 UTC on D (the end-of-day value of D - 1).
- **Quality checks.** Any daily price move larger than 50%, and any gap in an asset's data, is flagged for review. A missing price is carried forward for up to 3 days.

3. Eligibility

An asset is eligible at a review if all of the following hold on the selection date (the day before the review):

1. **Not an excluded type.** Stablecoins (including algorithmic, fiat-backed and yield-bearing), wrapped and bridged tokens, liquid-staking and restaking receipts, exchange-issued pegged tokens (e.g. Binance-Peg), tokenized gold, commodities, stocks, funds, treasuries, private credit and other tokenized off-chain assets. These are identified from CoinMarketCap tags (stablecoin, wrapped-tokens, rehypothecated-crypto, tokenized-* and others), plus a published manual list. Governance tokens of staking or stablecoin protocols (for example LDO, JTO, SKY, ENA) remain eligible.
2. **In the universe.** After removing excluded types, the asset is among the **top 150** by CoinMarketCap's rank on the selection date. Only assets present in that day's ranked listing qualify. CoinMarketCap demotes assets whose circulating supply it cannot verify, so their self-reported market caps cannot buy a place in the index.
3. **History.** At least **90 days** of price history. A token that migrated from a predecessor inherits the predecessor's history.
4. **Liquidity.** A 30-day median daily trading volume of at least **$5 million**.
5. **Investability.** Traded on at least **10 trading pairs**.
6. **Not barred.** Assets that migrated to a successor token, or were removed by an emergency decision, cannot be selected again.

In 2020 fewer than 100 assets met these rules (the index held 63-93 constituents). The index never relaxes the rules to fill slots.

4. Selection and buffer

At each reconstitution the eligible assets are ranked 1, 2, 3, … by CoinMarketCap rank. To reduce turnover:

- an **existing constituent stays** while it ranks in the top **120**;
- a **new asset enters** only if it ranks in the top **90**;
- remaining slots are filled with the highest-ranked eligible assets not yet selected; if too many qualify, the lowest-ranked are dropped.

Ties are broken by market cap, then alphabetically by identifier.

5. Weighting (modified market cap)

1. **Raw weight** = asset market cap ÷ total market cap of all constituents.
2. **Single-asset caps.** Bitcoin and Ethereum are capped at **20%**, every other asset at **10%**. Weight above a cap is redistributed to the uncapped assets in proportion to their weights, repeating until no asset exceeds its cap.
3. **Aggregate cap.** Assets weighing more than **4.5%** may not total more than **48%**. If they do, they are scaled down proportionally to 48%, and the freed weight is redistributed to the other assets in proportion to their weights, none of which may rise above 4.5%.
4. If there are too few assets for a cap to hold, the cap is relaxed as little as possible and the event records a warning.

C100-EW gives each constituent an equal weight and applies no caps.

6. Schedule

Event	When	What changes
Rebalance	First Monday of every month, 00:00 UTC	Weights reset to target; membership unchanged
Reconstitution	First Monday of January, April, July and October, 00:00 UTC	Membership reviewed (eligibility and buffer), then weights reset
Corporate action	Date of the token event	Units converted (see section 8)
Emergency removal	Next 00:00 UTC after approval	Asset removed at its last price

Selection and weights use data from the day before the event (the 00:00 UTC values dated the previous day), and prices at the event's own 00:00 UTC close.

7. Index calculation

The index uses the divisor method:

Level = Sum (units × price) ÷ divisor

- The base value is **1,000** on **January 6, 2020**.
- At each rebalance, reconstitution, corporate action and removal, new units are set so each constituent has its target weight. The divisor is then reset so the level just after the change equals the level just before it. Index changes therefore never move the index level.
- At a rebalance, units = weight × total constituent market cap ÷ price, and divisor = total constituent market cap ÷ current level.
- All index arithmetic uses 40-significant-digit decimal math. No floating-point rounding enters the divisor.
- **Daily close:** the level at 00:00 UTC. **Live value:** recalculated about every 5 minutes from the current units and divisor, using the latest available prices.

8. Corporate actions

When a token migrates to a new contract or redenominates, holders receive the new token at a published ratio. The index does the same: units are converted at the swap ratio, and the divisor keeps the level unchanged. A token waiting for its successor to start trading is held at its last price. Each action is published with its source and checked against the prices of both tokens. It applies to any variant holding the token on that date. Registered actions:

Date	From	To	Ratio
2020-09-05	Elrond (ERD)	MultiversX (EGLD)	1,000 : 1
2020-10-04	ETHLend (LEND)	Aave (AAVE)	100 : 1
2021-04-16	Pundi X (NPXS)	Pundi X (PUNDIX)	1,000 : 1
2021-07-09	Bitcoin Cash ABC (BCHA)	eCash (XEC)	1 : 1,000,000
2024-09-04	Polygon (MATIC)	Polygon (POL)	1 : 1
2025-01-13	Fantom (FTM)	Sonic (S)	1 : 1

9. Emergency removals

An asset can be removed between reviews if it is delisted, loses its peg, or suffers an exploit. A removal is proposed, then approved by the index administrator, and every step is written to an audit log. It takes effect at the next 00:00 UTC close: the asset is removed at its last price, the remaining units are unchanged, and the divisor absorbs the change. A removed asset is excluded from future selection.

Separately, if an asset has no price for more than 3 days it is removed automatically at its last price.

10. Backtest and history

Index history before launch is a backtest calculated with these exact rules and the same engine that calculates the live index. The universe at each historical date is the CoinMarketCap ranking of that date, with no hindsight. Backtested performance is hypothetical: it does not reflect trading, fees or slippage, and it does not predict future results.

11. Governance and changes

Methodology changes are versioned and published here before they take effect. Index levels already published are not restated, except to correct calculation errors, which are disclosed.