

# Brain Machine Learning Middle-Frequency Strategy on Cryptocurrencies

## Objective

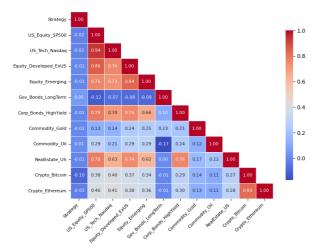
The strategy aims to invest in high-quality, liquid digital assets using a directional momentum-based long/short approach that is fully systematic and automated. It seeks to deliver superior risk-adjusted returns across both rising and falling markets, while maintaining controlled volatility and drawdowns.

## **Team and Key Differentiators**

- Brain (<a href="https://braincompany.co">https://braincompany.co</a>) is a research focused company that develops proprietary signals based on alternative data and algorithms for investment strategies on financial markets.
- Brain's team is formed by Ph.D. Physicists with strong backgrounds in statistical modelling and machine learning, applying the same scientific rigor developed through years of theoretical physics research to the design and validation of our models.
- The approach uses proprietary robust optimization techniques in a machine learning framework to avoid overfitting risks in the optimization of parameters. Using our proprietary framework, multiple out-ofsample segments (blue lines) are employed to estimate the expected P&L distribution across different training-window lengths and re-training frequencies.
- The live performance can be monitored through a dedicated dashboard where real-time signals are recorded. To request access, please contact us at contact@braincompany.co.

### Correlation with Asset Classes

The strategy has a very low correlation with major asset classes as shown in the following correlation matrix.



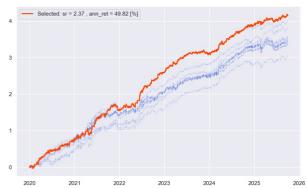
Last update: 12/11/2025

## **Key Metrics**

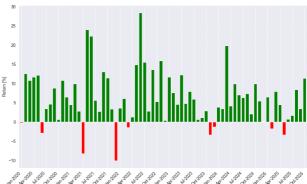
Out of condition (*)	I 2020 N 2025
Out-of-sample interval (*)	Jan 2020 – Nov 2025
Live date (*)	29 <sup>th</sup> Sept 2025
Currencies covered	ETH and BTC
Approach	Directional Long Short
Annualized return	50.4 [%]
Volatility	21.0 [%]
Maximum Drawdown	8.5 [%]
Sharpe ratio	2.4
Sortino ratio	2.7
Calmar ratio	5.9
Average return per trade	0.63 [%]

(\*) All reported data and metrics are fully out-of-sample. For the period prior to the live start date, the results represent rigorously reconstructed out-of-sample performance, designed to replicate how the system would have behaved under live trading conditions. Trading costs of 2.5 bps per operation are applied. The live date denotes the exact date when the strategy commenced live execution and was made available to its first institutional investor.

#### **Strategy Cumulative Return**



#### Strategy Monthly Returns [%]



DISCLAIMER: the content of this presentation is not to be intended as investment advice. The material is provided for informational purposes only and does not constitute an offer to sell, a solicitation to buy, or a recommendation or endorsement for any security or strategy, nor does it constitute an offer to provide investment advisory or other services by Brain. Brain makes no guarantees regarding the accuracy of the information expressed in this document.