CERTIFICATE OF BACKTEST

# VIX Gate

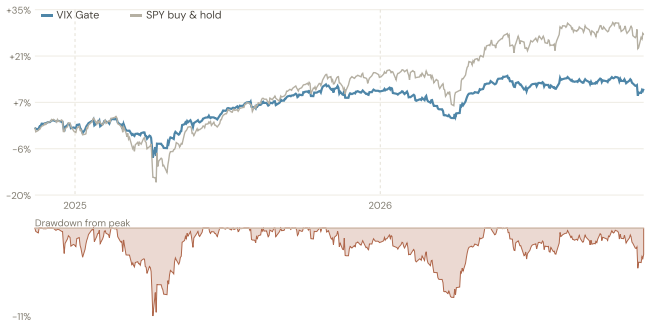
VIX POSITION SIZING ALGORITHM

SPY · daily sizing overlay

| +11.5% | +5.6% | -11.3% | 0.59 | +28.9% | -20.0% | 64% | -3.4% |
|---|---|---|---|---|---|---|---|
| Total return | Per year (CAGR) | Max drawdown | Sharpe (daily) | SPY total return | SPY max drawdown | Avg. invested | Worst day |

Read this one as a risk tool. Sized by the gate, SPY made +11.5% against +28.9% for buy & hold, with a worst drop of -11.3% against -20.0%. It gives up upside in exchange for smaller drawdowns; it is meant to sit on top of the strategies you already run.

## Equity curve and drawdown




## Year by year

| CALENDAR YEAR | STRATEGY | SPY BUY & HOLD |
|---|---|---|
| 2024 (from Nov 15) | -0.1% | +0.0% |
| 2025 | +10.8% | +16.5% |
| 2026 (to Nov 13) | +0.7% | +10.6% |

## What the rules do

- VIX Gate is a sizing rule, not a stock picker: each day it outputs how much of your normal position size the market regime allows (0% to 85%).
- It uses the same six-rung VIX ladder as Vol Harvest. In the panic and fear rungs it cuts size or goes to zero; in calm bull rungs it allows 70%.
- This certificate applies it to the simplest possible book: SPY sized by the gate, the rest in cash, so you can see what the gate alone does to risk.

This is a summary. Exact thresholds and code ship with the product.

## How it was tested

| | |
|---|---|
| TEST PERIOD | 2024-11-15 to 2026-11-13 (2 years, daily bars) |
| INSTRUMENTS | SPY · daily sizing overlay |
| DATA SOURCE | Massive daily adjusted OHLC (SPY, GLD, NVDA, AAPL, GOOGL, MSFT); VIX daily close from Yahoo (^VIX, CBOE index; not in the Massive plan) |
| EXECUTION | signal on close t, rebalance at next open, 5 bps per side on turnover, no leverage, cash earns 0% |
| COSTS | 5 basis points (0.05%) per side on every buy and sell; no leverage; idle cash earns 0% |
| STARTING EQUITY | Indexed to 1.00 (shown as % growth); results do not depend on account size |
| BENCHMARK | SPY bought and held over the same window (Massive daily adjusted closes) |

**Hypothetical backtest.** These results were produced by running fixed rules over past market data. They were not earned by a real account, and they are not a promise or guarantee of future results. Real trading adds slippage, gaps, partial fills, outages and behavior that a simulation does not capture, and losses can exceed what is shown. This certificate was generated by NorthTape from its own records; it has **not been audited or verified by any third party**. Nothing here is investment advice. See the risk disclosure.

Integrity receipt (SHA-256 of record.json with the sha256 and certificate_id fields removed, keys sorted, compact JSON): `4cffb6ce002035e509a8f7a92d21d1035bef0eb74582c2b4834bad843d35722f`