

Momentum Pullback

This momentum trend-following system uses a smoothed oscillator, a normalized momentum velocity measure, and a price efficiency ratio to identify and manage trades on a weekly timeframe. It incorporates regime filtering and adaptive stop-loss rules to optimize trade timing and risk control.

System overview and components

1. Multi-timeframe price data

The system operates on a user-defined lower timeframe (e.g., 60 minutes) while signaling on a higher timeframe chart. This allows finer granularity in momentum and price action detection while maintaining a broader trend perspective.

2. Smoothed oscillator for momentum

A double-smoothed oscillator captures price momentum and overbought/oversold conditions with reduced noise, helping to identify potential reversal points within trends.

3. Momentum velocity measure

The system calculates a normalised velocity of price returns to assess the strength and acceleration of the current momentum, helping to confirm trade entries and exits.

4. Price efficiency ratio

A ratio comparing net price movement to cumulative absolute price changes over a lookback period helps detect trending vs. choppy price behavior, filtering out low-quality moves.

5. Market regime filter

A broader trend regime is defined by a normalized momentum calculation, categorizing market states into five color-coded zones. Trades are taken only when the market is in bullish or neutral zones for longs, and bearish or neutral zones for shorts.

6. Trade entry logic

Long trades are initiated when momentum conditions improve from an oversold level, momentum velocity is rising, price efficiency is increasing, and the market regime is bullish or neutral.

Short trades start when momentum declines from an overbought level, momentum velocity decreases, price efficiency falls, and the regime is bearish or neutral.

7. Trade exit logic

Positions exit when momentum reverses, or when price breaches fixed or trailing stop-loss thresholds. Trailing stops are based on the highest (for longs) or lowest (for shorts) price since entry and use fixed percentage buffers.

8. Trade management

The system tracks position state, entry price, and price extremes for stop-loss management.

Strengths

- The multi-timeframe approach enhances signal precision while maintaining trend context.
- Combines momentum, velocity, and price efficiency to filter high-quality trades.
- Uses a clear market regime filter to avoid trading against prevailing trends.
- Fixed and trailing stop-losses balance risk management and allow letting winners run.

Suitability and usage notes

Best suited for weekly timeframe traders seeking trend-following signals with momentum pullback entries confirmed by multiple filters and regime context. Ideal for portfolios blending trend and momentum strategies with disciplined risk management.