

Gold RangeGuard Trader

Algorithmic Excellence in XAUUSD Mean Reversion

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Version 1.10 - Algorithmic AI

1. Entry Logic and Signals

The EA utilizes advanced logic based on the RSI indicator to accurately pinpoint reversal points on the M15 timeframe, filtering out false signals and consistently operating in harmony with market volatility.

RSI Signals (H1): The EA generates trading signals by monitoring RSI extremes (Period 14, default). When the RSI drops below the Buy threshold (30), it prepares for a long position; when it rises above the Sell threshold (70), for a short position. All parameters are fully customizable.

Smart Cooldown System: After opening a Buy position, the RSI must return above the neutral level (50) before authorizing a new long entry. The same applies to Short positions (must return below 50). This mechanism prevents unnecessary multiple entries and avoids overload when the RSI stalls in prolonged overbought or oversold conditions.

Moving Average Trend Filter (Optional): A directional filter (default SMA 50 on D1) ensures trading in the direction of the primary trend. If enabled, the EA will only open Buy positions if the price is above the moving average, and Sell positions only if it is below.

2. Risk and Capital Management

The EA is designed to be highly accessible and is fully compatible with the strict rules of Prop Firms.

- **Reduced minimum capital:** Operational from as low as 200 USD.
- **Leverage:** A 1:30 leverage is sufficient.

- **Operation:** M15 timeframe, 24/7 operability.
- **Total protection:** Every single trade is strictly protected by a hard Stop Loss order.

The user can choose between two risk profiles:

- **1 Trade Mode:** The EA will open a maximum of 1 trade per asset at a time. Ideal for those seeking extremely conservative trading with minimal drawdown.
- **3 Trades Mode:** The EA can open up to 3 simultaneous trades per asset. Ideal for those seeking faster capital growth, accepting a physiologically higher drawdown.

3. Integrated Unique Technologies

1. **Adaptive Stop Loss and Take Profit (ATR-Based):** The size of SL and TP orders is not fixed, but dynamically adapts to market conditions. If the market is calm (low volatility), the EA uses tighter Stop and Target levels. If volatility explodes, the distances increase proportionally. This technology keeps objectives realistic and perfectly aligned with current market conditions.
2. **Fixed 1:1 Risk/Reward Ratio:** The Take Profit distance is always exactly equal to the Stop Loss distance. This perfect mathematical balance ensures that a single losing trade does not wipe out previously generated profits, making the growth curve stable and the system extremely resilient.
3. **Trading with Limit Orders (Trap Orders):** Gold RangeGuard Trader adopts a strategic wait-and-see approach. Once an RSI signal is received, the EA does not enter the market aggressively. Instead, it places limit "trap" orders (Buy Limit / Sell Limit) calculated on the ATR, waiting for the price to spike to capture the reversal at the best possible price. This approach drastically improves the Profit Factor, Recovery Factor, and Expected Payoff.
4. **Optimized Market Exposure:** Gold RangeGuard Trader does not leave positions at the mercy of the market for days. This pure intraday approach ensures that trades (and pending orders) have a rapid life cycle (up to 24 hours on average), allowing you to lock in profits or cut risks before the macro-trend changes irreversibly.

4. Performance Scenarios (Real Tick Backtests)

Tests conducted between 2024 and 2026 using the most accurate historical data available (Real Ticks) have demonstrated the algorithm's versatility across two separate risk profiles. Both maintain an exceptional Win Rate of 83% on Buy trades.

Metric	Scenario A (1 TRADE)	Scenario B (3 TRADES)
<i>Target User</i>	Prop Firms / Challenges	Personal Account
<i>Objective</i>	Minimum Risk	Rapid Growth
Net Profit	\$ 3,064	\$ 6,604
Maximum Drawdown	6.94%	15.20%
Profit Factor	3.26	2.51
Total Trades	123	324

Data Analysis

- **Scenario A (Low Risk):** This is the ideal configuration for passing Prop Trading firm challenges (such as FTMO or similar). The drawdown below 7% paired with a Profit Factor of over 3 makes it extremely safe.
- **Scenario B (High Growth):** Doubles total profits by opening up to 3 positions in lateral excess zones. Perfect for personal accounts where the investor tolerates up to 15% physiological fluctuation to maximize capital growth.

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