

Description of technical indicators

Technical Indicator	Description
volume_adi	Accumulation/Distribution Index, a volume-based indicator designed to measure the cumulative flow of money into and out of a security.
volume_obv	On-Balance Volume, tracks cumulative buying and selling pressure by adding the volume on "up" days and subtracting volume on "down" days.
volume_cmf	Chaikin Money Flow, measures the amount of Money Flow Volume over a specific period.
volume_fi	Force Index, uses price and volume to assess the power behind a move or identify possible turning points.
volume_em	Ease of Movement, a price and volume based indicator designed to measure the 'ease' of price movement.
volume_sma_em	Simple Moving Average of the Ease of Movement.
volume_vpt	Volume Price Trend, a volume-based technical analysis indicator which acts as a leading indicator of price movements.
volume_vwap	Volume Weighted Average Price, an intraday indicator that provides the average price an instrument has traded at throughout the day, based on both volume and price.
volume_mfi	Money Flow Index, a technical oscillator that uses price and volume data for identifying overbought or oversold signals in an asset.
volume_nvi	Negative Volume Index, which focuses on days where the volume decreases from the previous day.
volatility_bbm	Bollinger Bands Middle Line, a line in the center of the Bollinger Bands, which are volatility bands placed above and below a moving average.
volatility_bbh	Bollinger Bands High, a line representing the upper band of the Bollinger Bands.

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volatility_bbl	Bollinger Bands Low, a line representing the lower band of the Bollinger Bands.
volatility_bbw	Bollinger Bands Width, a technical analysis indicator derived from the standard Bollinger Bands.
volatility_bbp	Bollinger Bands Percentage, a related indicator which measures the position of the latest close relative to the range defined by the Bollinger Bands.
volatility_bbhi	Indicator of whether the High price has hit the Bollinger upper band.
volatility_bbli	Indicator of whether the Low price has hit the Bollinger lower band.
volatility_kcc	Keltner Channels Center, a volatility indicator that displays a channel derived from simple moving averages.
volatility_kch	Keltner Channels High, a line that plots the upper band of the Keltner Channels.
volatility_kcl	Keltner Channels Low, a line that plots the lower band of the Keltner Channels.
volatility_kcw	Keltner Channels Width, a line that plots the width of the Keltner Channels.
volatility_kcp	Keltner Channels Percentage, a related indicator which measures the position of the latest close relative to the range defined by the Keltner Channels.
volatility_kchi	Keltner Channels High Indicator, identifies whether the price has hit the high of the Keltner Channel.
volatility_keli	Keltner Channels Low Indicator, identifies whether the price has hit the low of the Keltner Channel.
volatility_dcl	Donchian Channel Low, a line that plots the lowest price for a set period of time.
volatility_dch	Donchian Channel High, a line that plots the highest price for a set period of time.

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volatility_dcm	Donchian Channel Middle, a line that plots the average of the Donchian Channel High and Donchian Channel Low.
volatility_dcw	Donchian Channel Width, a line that plots the width of the Donchian Channel (high - low).
volatility_dcp	Donchian Channel Percentage, a line that measures the position of the latest close relative to the range defined by the Donchian Channel.
volatility_atr	Average True Range, a measure of market volatility.
volatility_ui	Ulcer Index, a measure of downside risk, in terms of both the depth and duration of price declines.
trend_macd	Moving Average Convergence Divergence, a trend-following momentum indicator that shows the relationship between two moving averages of a security's price.
trend_macd_signal	The signal line for the MACD, which is an EMA of the MACD.
trend_macd_diff	The difference between MACD and its signal line.
trend_sma_fast	Simple Moving Average with a fast lookback period.
trend_sma_slow	Simple Moving Average with a slow lookback period.
trend_ema_fast	Exponential Moving Average with a fast lookback period.
trend_ema_slow	Exponential Moving Average with a slow lookback period.
trend_vortex_ind_pos	Positive Vortex Indicator, an indicator designed to identify start and end of market trends.
trend_vortex_ind_neg	Negative Vortex Indicator.
trend_vortex_ind_diff	The difference between Positive and Negative Vortex Indicator.

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trend_trix	TRIX, a momentum oscillator that displays the percent rate of change of a triple exponentially smoothed moving average.
trend_mass_index	Mass Index, a volatility indicator developed to identify trend reversals by measuring the narrowing and widening of the range between the high and low prices.
trend_dpo	Detrended Price Oscillator, an indicator designed to remove trend from price and make it easier to identify cycles.
trend_kst	Know Sure Thing, a momentum oscillator based on the smoothed rate-of-change for four different timeframes.
trend_kst_sig	Signal line for the Know Sure Thing.
trend_kst_diff	The difference between Know Sure Thing and its signal line.
trend_ichimoku_conv	Ichimoku Kinko Hyo Conversion line, averages the high and low for the last nine periods.
trend_ichimoku_base	Ichimoku Kinko Hyo Base line, averages the high and low for the past 26 periods.
trend_ichimoku_a	Ichimoku Kinko Hyo 'A' line, also known as the Leading Span A or Senkou Span A, averages the conversion and base lines, and plots it 26 periods ahead.
trend_ichimoku_b	Ichimoku Kinko Hyo 'B' line, also known as the Leading Span B or Senkou Span B, averages the high and low for the past 52 periods, and plots it 26 periods ahead.
trend_stc	Schaff Trend Cycle, a type of oscillator and it is based on the assumption that, regardless of time frame, trends accelerate and decelerate in cyclical patterns.
trend_adx	Average Directional Movement Index, an oscillator that measures trend strength regardless of direction.
trend_adx_pos	The Positive Directional Indicator, part of the Average Directional Index (ADX) system and is used to measure the presence of an uptrend.

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trend_adx_neg	The Negative Directional Indicator, part of the Average Directional Index (ADX) system and is used to measure the presence of a downtrend.
trend_cci	Commodity Channel Index
trend_visual_ichimoku_a	A visualised Ichimoku Kinko Hyo 'A' line.
trend_visual_ichimoku_b	A visualised Ichimoku Kinko Hyo 'B' line.
trend_aaron_up	Aroon Up, a component of the Aroon Indicator system and is used to measure the strength of an uptrend.
trend_aaron_down	Aroon Down, a component of the Aroon Indicator system and is used to measure the strength of a downtrend.
trend_aaron_ind	Aroon Indicator, identifies when trends are likely to change direction.
trend_psar_up	Parabolic Stop and Reverse Up, a trend-following indicator providing entry and exit points.
trend_psar_down	Parabolic Stop and Reverse Down, another trend-following indicator providing entry and exit points.
trend_psar_up_indicator	Indicator for Parabolic SAR (Stop and Reverse) Up.
trend_psar_down_indicator	Indicator for Parabolic SAR (Stop and Reverse) Down.
momentum_rsi	Relative Strength Index, a momentum oscillator that measures the speed and change of price movements.
momentum_stoch_rsi	Stochastic RSI, an indicator of an indicator useful in identifying overbought and oversold conditions.
momentum_stoch_rsi_k	Stochastic RSI fast line.

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momentum_stoch_rsi_d	Stochastic RSI slow line.
momentum_tsi	True Strength Index, a momentum oscillator based on a double smoothing of price changes.
momentum_uo	Ultimate Oscillator, a range-bound oscillator that uses three different time periods to reduce the volatility and false transaction signals that are common in many other single-period oscillators.
momentum_stoch	Stochastic Oscillator, a momentum indicator comparing a particular closing price of a security to a range of its prices over a certain period of time.
momentum_stoch_signal	Signal line for the Stochastic Oscillator.
momentum_wr	Williams %R, a momentum indicator that measures overbought/oversold levels.
momentum_ao	Awesome Oscillator, a histogram showing the market momentum of a recent number of periods compared to the momentum of a larger number of previous periods.
momentum_roc	Rate of Change, a momentum oscillator that measures the percent change in price from one period to the next.
momentum_ppo	Percentage Price Oscillator, a momentum oscillator that measures the difference between two moving averages as a percentage of the larger moving average.
momentum_ppo_signal	Signal line for the Percentage Price Oscillator.
momentum_ppo_hist	Histogram for the Percentage Price Oscillator.
momentum_pvo	Percentage Volume Oscillator, measures the difference between two volume-based moving averages as a percentage of the larger moving average.
momentum_pvo_signal	Signal line for the Percentage Volume Oscillator.
momentum_pvo_hist	Histogram for the Percentage Volume Oscillator.

Technical Indicator	Description
momentum_kama	Kaufman's Adaptive Moving Average, a moving average designed to account for market noise or volatility.
others_dr	Daily return, the gain or loss made by the stock compared to the previous day.
others_dlr	Daily log return, the logarithmic return of the stock compared to the previous day.
others_cr	Cumulative return, the aggregate return of the stock over a period.