

## Average True Range

The True Range and Average True Range can be plotted on the bottom of the chart window. The True Range values will plot as a histogram. The Average True Range will plot as a line at the bottom of the chart. The values will increase during volatile trading periods, and decrease during slow (sideways) trading periods.



### Properties

**Multiplier** - Used to adjust the amplitude of the displayed ATR line (1 is recommended).

**Average** - Number of N periods used to average the True Range.

## ATR Bands

Two check box options are provided to display two studies based on the Average True Range.

ATR Bands – Check to display a channel based on the ATR and a Data Point.

ATR Trend – Check to display a trailing stop based on the ATR and a Data Point.



## Formula

True Range = High – Low

Substitute the previous bar's Close for the High, if higher than the current High.

Substitute the previous bar's Close for the Low, if lower than the current Low.

Average True Range = Moving average of each bar's True Range using N periods.

Upper Band = Data Point + Average True Range \* Multiplier

Lower Band = Data Point – Average True Range \* Multiplier

ATR Trend = Close above the Upper Band, or Close below the Lower Band.

# ATR Trend



Recommended: Multiplier = 1.5, Average = 13, Data Point = (High+Low) / 2