

## Stock Price Bollinger Band/RSI Ranker Help

The Stock Price Bollinger Band/RSI Ranker allows the user to create stock lists based on Bollinger Bands and the Relative Strength Indicator of the stock's close prices. These rankings can use Bollinger Band breakout, Bollinger Band Bandwidth and high and low Relative Strength Indicators (RSI).

Bollinger Bands are constructed by taking the mean and the standard deviation of the close prices over the same recent time period. The high band is the stock price two standard deviations above the mean. The low band is the stock price two standard deviations below the mean. These are the equations behind the Bollinger Band:

- **Mean** - The stock close prices for the time period selected are averaged together to form the mean.

$$\text{Mean} = [ \text{Sum from 1 to n } \{ \text{Closing Prices} \} ] / n$$

n is the number of days used in the Bollinger Band.

- **Standard Deviation** - The standard deviation (Std. Dev.) of the stock close prices is found for the same time period of the mean

$$\text{Std. Dev.} = \text{square root of } [ (\text{Sum from 1 to n } (\text{Close Price} - \text{Mean})^2) / (n-1) ]$$

- **High Bollinger Band** - Mean + 2\*(Std. Dev.)
- **Low Bollinger Band** - Mean - 2\*(Std. Dev.)

The Bollinger Band develops trading signals based on where the last stock price close is relative to the bands and how much the Bands have constricted. The location of the recent stock close price within the Band is constructed using a percentage called %b as follows:

$$\%b = 100 * (\text{Latest Stock Close} - \text{Low Bollinger Band}) / (\text{High Bollinger Band} - \text{Low Bollinger Band})$$

Bollinger Band constriction is measured using the Bollinger Band Bandwidth called BW which is constructed as follows:

$$\text{BW} = (\text{High Bollinger Band} - \text{Low Bollinger Band}) / \text{Mean}$$

Bollinger Band constriction is also referred to as The Squeeze. ( see "Bollinger on Bollinger Bands", John Bollinger, McGraw-Hill, 2002.)

The Relative Strength Index (RSI) was developed by Welles Wilder. The equation for the RSI is

$$\text{RSI} = 100 - (100 / (1 + (U/D)))$$

Within the time period selected, U is the average of the close prices when the stock rose that day and D is the average of the close prices when the stock fell that day. The RSI usually tops above 70 and bottoms below 30 and has a range between 0 and 100.

The rankings that are created on the Platinum web site using Bollinger Bands and RSI are as follows:

- **Breakout Hi Using Short BB**  
Stocks are ranked by highest %b using the short Bollinger Band.

- **Breakout Low Using Short BB**  
Stocks are ranked by lowest %b using the short Bollinger Band.
- **Lowest Short BB Bandwidth (possible Squeeze)**  
Stocks are ranked by lowest Short Bollinger Band Bandwidth.
- **Lowest Short BW / Long BW (Squeeze)**  
Stocks are ranked by lowest of the Short Bollinger Band Bandwidth / Long Bollinger Band Bandwidth.
- **RSI = Relative Strength Index in percent.**  
Stocks are ranked by lowest or highest RSI

Past studies have yielded these popular values for the days used in Bollinger Bands and RSI

- The most common BB days value is 20 days for breakouts and is the days recommended by Bollinger in his recent book.
- 10 and 30 days are two other periods mentioned.
- The Squeeze indicator typically uses a 100 to 120 day long Bollinger Bandwidth and a 20 to 30 day short Bollinger Bandwidth.
- Wilder recommends 14 days for the RSI. Other popular days for the RSI have been 9 and 25 day.

The input parameters are shown next:

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A stock ranker using Bollinger Bands and the Relative Strength Indicator. To learn how to use the ranking below click [↑](#)

Step 1 : Create a Ranked Stock List

**Ranking Criteria**

Short BB Breakout Hi

Short BB Breakout Low

Short BW Lowest Bandwidth

Short/Long BW Lowest Ratio

RSI Lowest

RSI Highest

Choose number of stocks displayed in Output Table

10    20    50    100

Number of days for Long Bollinger Band:

Number of days for Short Bollinger Band:

Number of days for RSI (<= Short Days):

Step 2 : Choose Stocks to Rank

Use Stocks in the list:

Mov Avg Bullish Crossover ▼

Or use Stocks matching these criteria:

Minimum Stock Volume:

Minimum Stock Price:

Maximum Stock Price:

Step 3: Perform a new

RANKING

Ranking Elapsed Time:  ~45s max

Below Step 1 is the desired ranking. The choices are:

- **Breakout Hi Using Short BB** - This ranker is useful for determining when stocks have broken through the high band. Sometimes its a major breakthrough.
- **Breakout Low Using Short BB** - This ranker is useful for determining when stocks have broken through the low band. Sometimes its a major breakthrough.
- **Lowest Short BB Bandwidth** - This ranker shows stock that potentially could be making a move up or down.
- **Lowest Short BW / Long BW (Squeeze)** - These stocks are trading in a narrow channel now and have not traded in this narrow channel in the past. These are the stocks being squeezed and are likely to breakout high or low.
- **High and Low RSI** - These stocks are at the high or low end of the RSI range. Stocks in either end of the RSI range are usually indicating that a move is forthcoming.

The web site defaults to Lowest Short BW / Long BW (Squeeze).

The next selection is the number of ranked stocks displayed in the web page stock ranking table. There are five selectable options of 10, 20, 50 and 100 stocks. After you create a stock ranking table, you are allowed to save the ranked stocks in your online stock lists. The number of stocks displayed is the most number of stocks that can be saved in a list. The default value is 50.

The next selections are the integer days in the long and short Bollinger Bands and the RSI days. The long days must be greater than the short days, and both must be greater than 0. The long days can be increased until the web site exhausts the online database. The web site has past stock data to 01/03/2000. The default values are 120 long days and 20 short days. The default RSI days is 14. The RSI days must be less than are equal to the Short Bollinger Band days.

The next selection is the input stock list. The user can select one of the online stock lists or create a list of stocks using three selections. If the input stock list is chosen, the stocks in the list are ranked without regard to volume or price.

If the second option is chosen, all online stocks are filtered using the selections shown. Then they are ranked. The first of the three selections is a the minimum stock volume. The default is 300,000.

Your second and third selections are "Minimum Stock Price" and "Maximum Stock Price". Only stocks with current stock close prices within this range of prices are ranked. The stock prices in the past are NOT required to meet the price range. The web page uses the minimum and maximum stock price values set in General Settings for "Access Stock List Ranker" as the initial default values.

Once you have made your selections, click the RANKING button next to Step 3. To the right of the RANKING button is a clock timer. The timer starts when you click the button. The server ranking time is limited to 45 seconds. Network time to transfer the data back to your web page can take awhile, depending on your connection, so the timer can exceed 45 secs.

Two different web page results can occur depending on how much time your search takes, how many stocks are being searched and the number of users online. If all the stocks are ranked successfully, a web page similar to the one below appears:

**Stock Price Bollinger Band/RSI Ranker**

**Moving Average Ranker**

**Change Ranker**

[Help ?](#)

A stock ranker using Bollinger Bands and the Relative Strength Indicator. To learn how to use the ranking below click [↑](#)

**Step 1 : Create a Ranked Stock List**

**Ranking Criteria**

- Short BB Breakout Hi
- Short BB Breakout Low
- Short BW Lowest Bandwidth
- Short/Long BW Lowest Ratio
- RSI Lowest
- RSI Highest

**Choose number of stocks displayed in Output Table**

- 10
- 20
- 50
- 100

Number of days for Long Bollinger Band:

Number of days for Short Bollinger Band:

Number of days for RSI (<=Short Days)

**Step 2 : Choose Stocks to Rank**

Use Stocks in the list:

Or use Stocks matching these criteria:

Minimum Stock Volume:

Minimum Stock Price:

Maximum Stock Price:

**Step 3:** 259 stocks were found satisfying your filter and the top 50 are shown below.

Save top  Stocks into the List named:   
 Or select a different List:

**SAVE**

**Step 4:** Perform a new

**RANKING**

Ranking Elapsed Time:

~45s max

**Stocks ranked using Lowest of Short Bandwidth / Long Bandwidth (The Squeeze)**  
 Long Bollinger Band Days = 120    Short Bollinger Band Days = 20

Click a stock symbol to get the chart

Rk	Stock	Stock Close	Short 20 Day Hi BB	Short 20 Day Low BB	Short %b	Long 120 Day BW	Short 20 Day BW	Short/Long BW	RSI	Stock Volume
1	<a href="#">AVNT chart:SP chart:ET</a>	20.03	20.09	18.22	96.93	1.25	0.10	0.08	57.71	930500
2	<a href="#">KR chart:SP chart:ET</a>	22.16	22.69	21.97	26.41	0.34	0.03	0.09	64.48	3477100
3	<a href="#">AG chart:SP chart:ET</a>	22.82	23.01	20.86	91.32	0.95	0.10	0.10	72.08	393200

Next to Step 3 the web page shows how many stocks were found satisfying your ranking and how many appear in the stock ranking table. Next to "Save" you can input in the text box the number of ranked stocks you wish to keep. The maximum number is the number of stocks shown in the stock ranking table. To the right of "Save" you can select any of the 9 online stock lists as the list that will accept the ranked stock list. Above the stock list selection you can backspace out and type in a new name for the stock list with which you are working. The list and the name are saved online when you click the Save button to the right of the stock lists. The stocks previously saved in the list selected are deleted when the new ranked stock list is saved.

If all the stocks filtered were not ranked successfully because the search ran out of the allocated time, a web page similar to the one below appears:

**Stock Price Bollinger Band/RSI Ranker**

**Moving Average Ranker**

**Change Ranker**

[Help ?](#)

A stock ranker using Bollinger Bands and the Relative Strength Indicator. To learn how to use the ranking below click [↑](#)

**Step 1 : Create a Ranked Stock List**

**Ranking Criteria**

- Short BB Breakout Hi
- Short BB Breakout Low
- Short BW Lowest Bandwidth
- Short/Long BW Lowest Ratio
- RSI Lowest
- RSI Highest

**Choose number of stocks displayed in Output Table**

- 10
- 20
- 50
- 100

Number of days for Long Bollinger Band:

Number of days for Short Bollinger Band:

Number of days for RSI (<=Short Days):

**Step 2 : Choose Stocks to Rank**

Use Stocks in the list:

Or use Stocks matching these criteria:  
 Minimum Stock Volume:   
 Minimum Stock Price:   
 Maximum Stock Price:

**Step 3:** 4881 stocks were found satisfying your filter and 1208 have been ranked so far.

Continue the last **RANKING** (Dont understand this button, click [Help ?](#))

**Step 4:** Save top  Stocks into the List named:  **SAVE**  
 Or select a different List:

**Step 5:** Perform a new **RANKING** Ranking Elapsed Time:  ~45s max

**Stocks ranked using Lowest of Short Bandwidth / Long Bandwidth (The Squeeze)**

Long Bollinger Band Days = 120 Short Bollinger Band Days = 20

Click a stock symbol to get the chart

Rk	Stock	Stock Close	Short 20 Day Hi BB	Short 20 Day Low BB	Short %b	Long 120 Day BW	Short 20 Day BW	Short/Long BW	RSI	Stock Volume
1	<a href="#">TRW</a> <a href="#">chart.SP</a> <a href="#">chart.ET</a>	51.47	51.93	49.84	78.09	0.60	0.04	0.07	50.12	767500
2	<a href="#">AVNT</a> <a href="#">chart.SP</a> <a href="#">chart.ET</a>	20.03	20.09	18.22	96.93	1.25	0.10	0.08	57.71	930500

Next to Step 3 the web page shows how many stocks were found satisfying your ranking and how many stocks have been ranked thus far. The web page ranking has a time limit of ~45 secs. If you reach this time limit, the ranking results thus far are returned to the web page. You have the option of continuing the ranking, which resumes where it left off, by clicking the RANKING button in Step 3. You can repeat this until all the stocks are searched and the extra RANKING button no longer appears on the web page. The table will reflect the ranking from all stocks searched. If you decide to repeat the ranking until all stocks are ranked, do not change any of the search filter settings until the ranking is complete.

The reason for the time limit is to prevent the browser from timing out and to distribute the server load between the users. A browser time out can occur if the ranking takes too long to complete.

In both of the cases discussed above a new search can be started at any time by clicking the RANKING button in the last Step shown.

The above ranked stock table is for an Short/Long BW. The columns are:

- **RK** - Rank. This is the initial ranking of the stock symbols.
- **Stock** - The stock symbol. Clicking the stock symbol takes you to the Chart web page. If you use the latest date, another link, "chart:MA", will be present next to the stock symbol. Clicking it will show a chart of the stock price, the StockPoint Bollinger Bands and the StockPoint RSI. Be aware, StockPoint uses "periods" that don't correspond to days for their own reasons and the charts are close to but do not exactly match the Platinum data.
- **Stock Close** - The latest stock closing price.
- **Short 20 Day HI BB** - The short hi Bollinger Band value.
- **Short 20 Day Low BB** - The short low Bollinger Band value.
- **Short %b** - The short Bollinger Band recent stock close percentage within the bands.
- **Long 120 Day BW** - The long Bollinger Band Bandwidth.
- **Short 20 Day BW** - The short Bollinger Band Bandwidth.
- **Short/Long BW** - The ratio of the short BW divided by the long BW.
- **RSI** - The Relative Strength Indicator.
- **Volume** - The latest stock (not option) trading volume.

These are trading strategies that traders have used in the past.

<b>Ranking</b>	<b>Explanation</b>	<b>Trades</b>
Rank on Hi RSI. Keep Stocks above 70. Rerank on Hi %b. Look for stocks on the high end of %b.	These stocks are showing the end of an up trend and a reversal may occur. Some traders wait a few days after the Bollinger Band is broken before taking a reverse trend position.	Bearish such as buy puts or sell stocks.
Rank on Low RSI. Keep Stocks below 30. Rerank on Low %b. Look for stocks on the low end of %b	These stocks are showing the end of a down trend and a reversal may occur. Be leery of stocks whose down trend may not end. Some traders wait a few days after the Bollinger Band is broken before taking a reverse trend position.	Bullish such as buy calls and stocks.
Rank on Short BW/Long BW. Save list and rerank in "Access the Stock List Ranker" using cheap percentile IV.	These stocks are trading in a narrow channel and potentially could break out. IV usually also decreases as the stock price displays no trend.	Look to capture quick profit using Buy Straddles on cheap options.