

## Stochastic Momentum Index Formula – Source: [www.blastchart.com](http://www.blastchart.com)

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In order to calculate SMI, start from “N”. Let’s suppose N=10. After choosing a period, determine the Center of High and Low Range during the period. In order to do so, use the following formula:

Let’s suppose “C” is the center of High and Low, then:

$$\mathbf{C = (High\ MAX + Low\ MIN) / 2}$$

Where

High MAX = The Highest Figure in the Range.

Low MIN = The Lowest Figure in the Range.

After calculating a center point of the range, subtract distance of Current Close from the Center of the Range.

$$\mathbf{H = CC\ TODAY - C}$$

Where

CC TODAY = Current Closing Price.

C = Center of High/Low Range.

In order to smooth the output of “H”, use a 3-period Exponential Moving Average. Following will be the procedure of smoothing “H”.

$$\mathbf{HS1 = (H) * (3) * Exponential\ Moving\ Average}$$

$$\mathbf{HS2 = (HS1) * (3) * Exponential\ Moving\ Average}$$

After smoothing “H”, smooth the difference of High and Low Price during the period using same 3-Period Exponential Moving Average. Divide the results of Second Smoothing by 2:

$$\mathbf{DHL1 = (High\ MAX - Low\ MIN) * (3) * Exponential\ Moving\ Average}$$

$$\mathbf{DHL2 = (High\ MAX - Low\ MIN) * (3) * Exponential\ Moving\ Average / 2}$$

In order to Calculate SMI, divide HS2 by DHL2. Multiplying the output by 100 will provide results in the form of a percentage.

$$\mathbf{SMI\ TODAY = (HS2 / DHL2) * 100}$$

### Parameters

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Period 1: (10)

Period 2: (3)

First Level: (-40)

Second Level (40)