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Historical High-Low Volatility: Parkinson

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$$\sigma = \sqrt{\frac{Z}{n4 \ln 2} \sum_{i=1}^n \left(\ln \frac{H_i}{L_i} \right)^2}$$

The Parkinson formula for estimating the historical volatility of an underlying based on high and low prices.

Symbol list:

σ	Volatility
Z	Number of closing prices in a year
n	Number of historical prices used in the volatility estimate
H_i	The high
L_i	The low