**SARIMA**

SARIMA stands for Seasonal Autoregressive Integrated Moving Average, or Seasonal ARIMA, is an extension of ARIMA that explicitly supports univariate time series data with a seasonal component. SARIMA is formed by including additional seasonal terms in the ARIMA.

Major problem with ARIMA is that it does not support seasonal data. That is a time series with a repeating cycle. ARIMA expects data that is either not seasonal or has the seasonal component removed, e.g. seasonally adjusted via methods such as seasonal differencing.

### Trend Elements

There are three trend elements that require configuration.

They are the same as the ARIMA model; specifically:

**p**: Trend Auto-regression order.

**d**: Trend difference order.

**q**: Trend moving average order.

### Seasonal Elements

There are four seasonal elements that are not part of ARIMA that must be configured; they are:

**P**: Seasonal autoregressive order.

**D**: Seasonal difference order.

**Q**: Seasonal moving average order.

**m**: The number of time steps for a single seasonal period.