

# TimeWindow

This operator defines a window based on the time.

## Parameter

- **size**: The size of the window. Can be either a single number or a pair of a number and a time unit. Possible values for the unit are one of [TimeUnit](#) like SECONDS, NANOSSECONDS etc. - default time is milliseconds
- **advance**: The advance how the window moves forward. Can be either a single number or a pair of a number and a time unit. Possible values for the unit are one of [TimeUnit](#) like SECONDS, NANOSSECONDS etc. - default time is milliseconds. default advance is 1
- **slide**: The slide of the window. When using this parameter **all elements in the windows will have the same starttimestamp** (e.g. helpful for aggregations), while advance will not change the starttimestamp. Can be either a single number or a pair of a number and a time unit. Possible values for the unit are one of [TimeUnit](#) like SECONDS, NANOSSECONDS etc. - default time is milliseconds. default advance is 1

## Example

```
/// sliding time window (notice: size and advance is directly based on the used timestamps.
/// if they are in milliseconds (which is default), size and advance are in milliseconds too.
output = TIMEWINDOW({
    size = 5,
    advance = 1
}, input)

/// sliding time window with another time unit for size.
/// size is converted from seconds into milliseconds
/// (since this is the default time granularity).
/// This means, size will be 5000 and advance will be 1
output = TIMEWINDOW({
    size = [5, 'SECONDS'],
    advance = 1
}, input)

/// sliding time window with another time unit for size and advance.
/// size and advance are converted from seconds into milliseconds
/// (since this is the default time granularity).
/// This means, size will be 5000 and advance will be 1000
output = TIMEWINDOW({
    size = [5, 'SECONDS'],
    advance = [1, 'SECONDS']
}, input)

/// sliding delta window, reduces time granularity to value of slide
output = TIMEWINDOW({
    size = 5,
    slide = 5
}, input)
```