

[Foundation](#) / MeasurementFormatter

Class

MeasurementFormatter

A formatter that provides localized representations of units and measurements.

iOS 10.0+ | iPadOS 10.0+ | Mac Catalyst 13.1+ | macOS 10.12+ | tvOS 10.0+ | visionOS 1.0+ | watchOS 3.0+

```
class MeasurementFormatter
```

Overview

You use the `string(from:)` method to create a localized representation of an [NSMeasurement](#) object, and you use the `string(from:)` method to create a localized representation of an [Unit](#) object. The formatter takes into account the specified `locale`, `unitStyle`, and `unitOptions` when producing string representations of units and measurements.

Tip

In Swift, you can use [Measurement.FormatStyle](#) rather than [MeasurementFormatter](#). The [FormatStyle](#) API offers a declarative idiom for customizing the formatting of various types. Also, Foundation caches identical [FormatStyle](#) instances, so you don't need to pass them around your app, or risk wasting memory with duplicate formatters.

Topics

Specifying the Format

```
var unitOptions: MeasurementFormatter.UnitOptions
```

The options for how the unit is formatted.

```
var unitStyle: Formatter.UnitStyle
```

The unit style.

```
var locale: Locale!
```

The locale of the formatter.

```
var numberFormatter: NumberFormatter!
```

The number formatter used to format the quantity of a measurement.

Converting Measurements

```
func string(from: Measurement<Unit>) -> String
```

Creates and returns a localized string representation of the provided measurement.

```
func string(from: Unit) -> String
```

Creates and returns a localized string representation of the provided unit of measure.

Constants

```
struct UnitOptions
```

Measurement formatter options.

Instance Methods

```
func string<UnitType>(from: Measurement<UnitType>) -> String
```

Relationships

Inherits From

Formatter

Conforms To

CVarArg

CustomDebugStringConvertible

CustomStringConvertible
Equatable
Hashable
NSCoding
NSCopying
NSObjectProtocol
NSSecureCoding