

# OpcEngineeringUnitInfo Members

**Namespace:** Opc.UaFx

**Assemblies:** Opc.UaFx.Advanced.dll, Opc.UaFx.Advanced.dll

The [OpcEngineeringUnitInfo](#) type exposes the following members.

## Constructors

### OpcEngineeringUnitInfo()

Initializes a new instance of the [OpcEngineeringUnitInfo](#) class.

**C#**

```
public OpcEngineeringUnitInfo()
```

### OpcEngineeringUnitInfo(Int32)

Initializes a new instance of the [OpcEngineeringUnitInfo](#) class using the `unitId` specified.

**C#**

```
public OpcEngineeringUnitInfo(int unitId)
```

#### Parameters

`unitId` [Int32](#)

The numeric identifier of the engineering unit.

#### Remarks

Using this constructor will use the [CommonCode](#) as the initial value of the [DisplayName](#) and [Description](#) of the engineering unit represented.

### OpcEngineeringUnitInfo(Int32, String)

Initializes a new instance of the [OpcEngineeringUnitInfo](#) class using the `unitId` and `displayName` specified.

**C#**

```
public OpcEngineeringUnitInfo(int unitId, string displayName)
```

#### Parameters

`unitId` [Int32](#)

The numeric identifier of the engineering unit.

`displayName` `String`

The name of the engineering unit which is typically an abbreviation. For example “h” for “hour”.

## OpcEngineeringUnitInfo(Int32, String, String)

Initialues a new instance of the `OpcEngineeringUnitInfo` class using the `unitId`, `displayName` and `description` specified.

**C#**

```
public OpcEngineeringUnitInfo(int unitId, string displayName, string description)
```

### Parameters

`unitId` `Int32`

The numeric identifier of the engineering unit.

`displayName` `String`

The name of the engineering unit which is typically an abbreviation. For example “h” for “hour”.

`description` `String`

The full name of the engineering unit such as “hour” or “meter per second”.

## OpcEngineeringUnitInfo(String)

Initializes a new instance of the `OpcEngineeringUnitInfo` class using the `displayName` specified.

**C#**

```
public OpcEngineeringUnitInfo(string displayName)
```

### Parameters

`displayName` `String`

The name of the engineering unit which is typically an abbreviation. For example “h” for “hour”.

## OpcEngineeringUnitInfo(String, String)

Initializes a new instance of the `OpcEngineeringUnitInfo` class using the `displayName` and `namespaceUri` specified.

**C#**

```
public OpcEngineeringUnitInfo(string displayName, string namespaceUri)
```

### Parameters

`displayName` `String`

The name of the engineering unit which is typically an abbreviation. For example “h” for “hour”.

namespaceUri String

A string representing the Uri of the organization (company, standards organization) that defines the engineering unit.

## OpcEngineeringUnitInfo(String, String, String)

Initializes a new instance of the OpcEngineeringUnitInfo class using the displayName, description and namespaceUri specified.

C#

```
public OpcEngineeringUnitInfo(string displayName, string description, string namespaceUri)
```

### Parameters

displayName String

The name of the engineering unit which is typically an abbreviation. For example “h” for “hour”.

description String

The full name of the engineering unit such as “hour” or “meter per second”.

namespaceUri String

A string representing the Uri of the organization (company, standards organization) that defines the engineering unit.

## Fields

### DefaultNamespaceUri

Defines the default value used for the NamespaceUri property.

C#

```
public static readonly string DefaultNamespaceUri
```

### Field Value

String

## Properties

# CommonCode

Gets the common code derived from the [UnitId](#) of the engineering unit represented.

**C#**

```
public string CommonCode { get; }
```

## Property Value

[String](#)

The unique code defined by the UNECE/CEFACT Trade Facilitation Recommendation No.20 from which the [UnitId](#) is derived. In case there is no [UnitId](#) defined (see [HasUnitId](#)) an empty string.

# Description

Gets or sets the full name of the engineering unit represented.

**C#**

```
public string Description { get; set; }
```

## Property Value

[String](#)

The full name of the engineering unit for example "hour" or "meter per second". For the according abbreviation see [DisplayName](#).

# DisplayName

Gets or sets the name of the engineering unit represented.

**C#**

```
public string DisplayName { get; set; }
```

## Property Value

[String](#)

The name (typically an abbreviation) of the engineering unit for example "h" for "hour" or "m/s" for "meter per second".

# HasUnitId

Gets a value indicating whether the engineering unit provides an according numeric identifier (see [UnitId](#)) for programmatic evaluation.

**C#**

```
public bool HasUnitId { get; }
```

## Property Value

### Boolean

The value true if the engineering unit provides an identifier for the unit represented; otherwise the value false.

## IsUndefined

Gets a value indicating whether the engineering unit does not provide any concrete information about the unit represented.

### C#

```
public bool IsUndefined { get; }
```

## Property Value

### Boolean

The value true if the engineering unit represented does not provide any concrete information; otherwise the value false. This property provides by default the value true in case there the parameterless default constructor is used to create a new instance of the [OpcEngineeringUnitInfo](#) class.

## NamespaceUri

Gets or sets a value that identifies the organization (company, standards organization) that defines the [OpcEngineeringUnitInfo](#) represented.

### C#

```
public string NamespaceUri { get; set; }
```

## Property Value

### String

A string representing the [Uri](#) of the organization (company, standards organization) that defines the engineering unit.

## UnitId

Gets or sets the numeric identifier of the engineering unit.

### C#

```
public int UnitId { get; set; }
```

## Property Value

### Int32

The numeric identifier of the engineering unit used for programmatic evaluation. A value equals -1 indicates that the [UnitId](#) is not available for the engineering unit represented.

# Methods

## GetCommonCode(Int32)

Retrieves the common code which is associated with the [unitId](#) specified.

### C#

```
public static string GetCommonCode(int unitId)
```

### Parameters

[unitId](#) [Int32](#)

The numeric unit identifier specified by the OPC Foundation for OPC UA to unique identify a specific unit specified by the UNECE/CEFACT Trade Facilitation Recommendation No.20.

### Returns

[String](#)

The according (mostly three letters) encoded string representation of the unit identified using [unitId](#) specified. In case there the [unitId](#) is less or equals zero or results into a non alphanumeric code a null reference (Nothing in Visual Basic).

## ToString()

Returns a string that represents the current [OpcEngineeringUnitInfo](#).

### C#

```
public override string ToString()
```

### Returns

[String](#)

A string that represents the current [OpcEngineeringUnitInfo](#) including the used [DisplayName](#) (if available), [Description](#) (if available), alternatively the [UnitId](#) or "Unknown" in case there the [OpcEngineeringUnitInfo](#) does not provide any engineering unit information.

# Operators

## Explicit(OpcEngineeringUnitInfo to EUInformation)

Converts a [OpcEngineeringUnitInfo](#) to an [EUInformation](#) object.

**C#**

```
public static explicit operator EUInformation(OpcEngineeringUnitInfo value)
```

## Implicit(EUInformation to OpcEngineeringUnitInfo)

Converts a [EUInformation](#) to an [OpcEngineeringUnitInfo](#) object.

**C#**

```
public static implicit operator OpcEngineeringUnitInfo(EUInformation value)
```





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