

PlcUInt16Array Members

Namespace: IPS7Lnk.Advanced

Assemblies: IPS7LnkNet.Advanced.dll, IPS7LnkNet.Advanced.dll

The [PlcUInt16Array](#) type exposes the following members.

Constructors

PlcUInt16Array(PlcIdentity, Int32)

Initializes a new instance of the [PlcUInt16Array](#) class using the specified [identity](#) and [length](#).

C#

```
public PlcUInt16Array(PlcIdentity identity, int length)
```

Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcUInt16Array](#) to which the PLC array belongs.

[length](#) [Int32](#)

The array length used to store the array values of the [PlcUInt16Array](#).

Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Word](#).

[ArgumentNullException](#)

The [identity](#) is a null reference (Nothing in Visual Basic).

[ArgumentOutOfRangeException](#)

The [length](#) is out of the bounds defined by [MinLength](#) and [MaxLength](#).

PlcUInt16Array(PlcIdentity, PlcName, Int32)

Initializes a new instance of the [PlcUInt16Array](#) class using the specified [identity](#), [name](#) and [length](#).

C#

```
public PlcUInt16Array(PlcIdentity identity, PlcName name, int length)
```

Parameters

[identity](#) [PlcIdentity](#)

The **PlcIdentity** of the new **PlcUInt16Array** to which the PLC array belongs.

name **PlcName**

The name of the array represented.

length **Int32**

The array length used to store the array values of the **PlcUInt16Array**.

Exceptions

ArgumentException

The **identity** does not refer to the **Word**.

ArgumentNullException

The **identity** or **name** is a null reference (Nothing in Visual Basic).

ArgumentOutOfRangeException

The **length** is out of the bounds defined by **MinLength** and **MaxLength**.

PlcUInt16Array(PlcIdentity, PlcName, UInt16[])

Initializes a new instance of the **PlcUInt16Array** class using the specified **identity**, **name** and **values**.

C#

```
public PlcUInt16Array(PlcIdentity identity, PlcName name, params ushort[] values)
```

Parameters

identity **PlcIdentity**

The **PlcIdentity** of the new **PlcUInt16Array** to which the PLC array belongs.

name **PlcName**

The name of the array represented.

values **UInt16[]**

The initial values of the new **PlcUInt16Array**.

Exceptions

ArgumentException

The **identity** does not refer to the **Word**.

ArgumentNullException

The **identity** or **name** is a null reference (Nothing in Visual Basic).

PlcUInt16Array(PlcIdentity, UInt16[])

Initializes a new instance of the [PlcUInt16Array](#) class using the specified [identity](#) and [values](#).

C#

```
public PlcUInt16Array(PlcIdentity identity, params ushort[] values)
```

Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcUInt16Array](#) to which the PLC array belongs.

[values](#) [UInt16\[\]](#)

The initial values of the new [PlcUInt16Array](#).

Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Word](#).

[ArgumentNullException](#)

The [identity](#) is a null reference (Nothing in Visual Basic).

PlcUInt16Array(PlcUInt16ArrayType)

Initializes a new instance of the [PlcUInt16Array](#) class using the specified [type](#).

C#

```
public PlcUInt16Array(PlcUInt16ArrayType type)
```

Parameters

[type](#) [PlcUInt16ArrayType](#)

The [PlcUInt16ArrayType](#) of the new [PlcUInt16Array](#) to which the PLC array belongs.

Exceptions

[ArgumentNullException](#)

The [type](#) is a null reference (Nothing in Visual Basic).

PlcUInt16Array(PlcUInt16ArrayType, PlcName, UInt16[])

Initializes a new instance of the [PlcUInt16Array](#) class using the specified [type](#), [name](#) and [values](#).

C#

```
public PlcUInt16Array(PlcUInt16ArrayType type, PlcName name, params ushort[] values)
```

Parameters

type [PlcUInt16ArrayType](#)

The [PlcUInt16ArrayType](#) of the new [PlcUInt16Array](#) to which the PLC array belongs.

name [PlcName](#)

The name of the array represented.

values [UInt16\[\]](#)

The initial values of the new [PlcUInt16Array](#).

Exceptions

[ArgumentNullException](#)

The **type** or **name** is a null reference (Nothing in Visual Basic).

PlcUInt16Array(PlcUInt16ArrayType, UInt16[])

Initializes a new instance of the [PlcUInt16Array](#) class using the specified **type** and **values**.

C#

```
public PlcUInt16Array(PlcUInt16ArrayType type, params ushort[] values)
```

Parameters

type [PlcUInt16ArrayType](#)

The [PlcUInt16ArrayType](#) of the new [PlcUInt16Array](#) to which the PLC array belongs.

values [UInt16\[\]](#)

The initial values of the new [PlcUInt16Array](#).

Exceptions

[ArgumentNullException](#)

The **type** is a null reference (Nothing in Visual Basic).

Methods

GetElementCore(Int32)

Retrieves the [PlcUInt16](#) at the specified index.

C#

```
protected override PlcUInt16 GetElementCore(int index)
```

Parameters

index [Int32](#)

The zero-based index of the element to get.

Returns

[PlcUInt16](#)

The [PlcUInt16](#) at the specified index.

GetValueCore(PlcDeviceConnection)

Retrieves the current value of the PLC value from a [IPlcDevice](#) using the **connection** specified.

C#

```
protected override ushort[] GetValueCore(PlcDeviceConnection connection)
```

Parameters

connection [PlcDeviceConnection](#)

The [PlcDeviceConnection](#) from that the data is to be retrieved.

Returns

[UInt16\[\]](#)

The current value of the PLC value.

Exceptions

[InvalidOperationException](#)

The **connection** is in [Faulted](#) state and cannot longer be opened.

[ObjectDisposedException](#)

The **connection** has been disposed of.

RelocateCore(PlcAddress)

Relocates the value to the **address** specified.

C#

```
protected override IPlcValue RelocateCore(PlcAddress address)
```

Parameters

address PlcAddress

The **PlcAddress** to that the value is to be relocated.

Returns

IPlcValue

A new instance of the same type as this PLC value instance relocated to the **address** specified.

SetValueCore(PlcDeviceConnection, UInt16[])

Stores the **value** in the **IPlcDevice** assigned to the **connection** specified.

C#

```
protected override void SetValueCore(PlcDeviceConnection connection, ushort[] value)
```

Parameters

connection PlcDeviceConnection

The **PlcDeviceConnection** to use to store the **value**.

value UInt16[]

The value to be stored.

Exceptions

InvalidOperationException

The **connection** is in **Faulted** state and cannot longer be opened.

ObjectDisposedException

The **connection** has been disposed of.

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