

PlcInt16Array Members

Namespace: IPS7Lnk.Advanced

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

The [PlcInt16Array](#) type exposes the following members.

Constructors

PlcInt16Array(PlcIdentity, Int16[])

Initializes a new instance of the [PlcInt16Array](#) class using the specified [identity](#) and [values](#).

C#

```
public PlcInt16Array(PlcIdentity identity, params short[] values)
```

Parameters

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

The [PlcIdentity](#) of the new [PlcInt16Array](#) to which the PLC array belongs.

[values](#) [Int16\[\]](#)

The initial values of the new [PlcInt16Array](#).

Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

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

PlcInt16Array(PlcIdentity, Int32)

Initializes a new instance of the [PlcInt16Array](#) class using the specified [identity](#) and [length](#).

C#

```
public PlcInt16Array(PlcIdentity identity, int length)
```

Parameters

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

The [PlcIdentity](#) of the new [PlcInt16Array](#) to which the PLC array belongs.

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

The array length used to store the array values of the [PlcInt16Array](#).

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](#).

PlcInt16Array(PlcIdentity, PlcName, Int16[])

Initializes a new instance of the [PlcInt16Array](#) class using the specified [identity](#), [name](#) and [values](#).

C#

```
public PlcInt16Array(PlcIdentity identity, PlcName name, params short[] values)
```

Parameters

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

The [PlcIdentity](#) of the new [PlcInt16Array](#) to which the PLC array belongs.

[name](#) [PlcName](#)

The name of the array represented.

[values](#) [Int16\[\]](#)

The initial values of the new [PlcInt16Array](#).

Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

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

PlcInt16Array(PlcIdentity, PlcName, Int32)

Initializes a new instance of the [PlcInt16Array](#) class using the specified [identity](#), [name](#) and [length](#).

C#

```
public PlcInt16Array(PlcIdentity identity, PlcName name, int length)
```

Parameters

identity PlcIdentity

The PlcIdentity of the new PlcInt16Array 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 PlcInt16Array.

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.

PlcInt16Array(PlcInt16ArrayType)

Initializes a new instance of the PlcInt16Array class using the specified type.

C#

```
public PlcInt16Array(PlcInt16ArrayType type)
```

Parameters

type PlcInt16ArrayType

The PlcInt16ArrayType of the new PlcInt16Array to which the PLC array belongs.

Exceptions

ArgumentNullException

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

PlcInt16Array(PlcInt16ArrayType, Int16[])

Initializes a new instance of the PlcInt16Array class using the specified type and values.

C#

```
public PlcInt16Array(PlcInt16ArrayType type, params short[] values)
```

Parameters

type [PlcInt16ArrayType](#)

The [PlcInt16ArrayType](#) of the new [PlcInt16Array](#) to which the PLC array belongs.

values [Int16\[\]](#)

The initial values of the new [PlcInt16Array](#).

Exceptions

[ArgumentNullException](#)

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

PlcInt16Array([PlcInt16ArrayType](#), [PlcName](#), [Int16\[\]](#))

Initializes a new instance of the [PlcInt16Array](#) class using the specified **type**, **name** and **values**.

C#

```
public PlcInt16Array(PlcInt16ArrayType type, PlcName name, params short\[\] values)
```

Parameters

type [PlcInt16ArrayType](#)

The [PlcInt16ArrayType](#) of the new [PlcInt16Array](#) to which the PLC array belongs.

name [PlcName](#)

The name of the array represented.

values [Int16\[\]](#)

The initial values of the new [PlcInt16Array](#).

Exceptions

[ArgumentNullException](#)

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

Methods

GetElementCore([Int32](#))

Retrieves the [PlcInt16](#) at the specified index.

C#

```
protected override PlcInt16 GetElementCore(int index)
```

Parameters

`index` `Int32`

The zero-based index of the element to get.

Returns

`PlcInt16`

The `PlcInt16` at the specified index.

GetValueCore(PlcDeviceConnection)

Retrieves the current value of the PLC value from a `IPlcDevice` using the `connection` specified.

C#

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

Parameters

`connection` `PlcDeviceConnection`

The `PlcDeviceConnection` from that the data is to be retrieved.

Returns

`Int16[]`

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, Int16[])

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

C#

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

Parameters

connection PlcDeviceConnection

The PlcDeviceConnection to use to store the value.

value Int16[]

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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