

# PlcDoubleArray Members

**Namespace:** IPS7Lnk.Advanced

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

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

## Constructors

### PlcDoubleArray(PlcDoubleArrayType)

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

**C#**

```
public PlcDoubleArray(PlcDoubleArrayType type)
```

#### Parameters

`type` [PlcDoubleArrayType](#)

The [PlcDoubleArrayType](#) of the new [PlcDoubleArray](#) to which the PLC array belongs.

#### Exceptions

[ArgumentNullException](#)

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

### PlcDoubleArray(PlcDoubleArrayType, Double[])

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

**C#**

```
public PlcDoubleArray(PlcDoubleArrayType type, params double[] values)
```

#### Parameters

`type` [PlcDoubleArrayType](#)

The [PlcDoubleArrayType](#) of the new [PlcDoubleArray](#) to which the PLC array belongs.

`values` [Double\[\]](#)

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

#### Exceptions

[ArgumentNullException](#)

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

## PlcDoubleArray(PlcDoubleArrayType, PlcName, Double[])

Initializes a new instance of the `PlcDoubleArray` class using the specified `type`, `name` and `values`.

### C#

```
public PlcDoubleArray(PlcDoubleArrayType type, PlcName name, params double[] values)
```

#### Parameters

`type` `PlcDoubleArrayType`

The `PlcDoubleArrayType` of the new `PlcDoubleArray` to which the PLC array belongs.

`name` `PlcName`

The name of the array represented.

`values` `Double[]`

The initial values of the new `PlcDoubleArray`.

#### Exceptions

`ArgumentNullException`

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

## PlcDoubleArray(PlcIdentity, Double[])

Initializes a new instance of the `PlcDoubleArray` class using the specified `identity` and `values`.

### C#

```
public PlcDoubleArray(PlcIdentity identity, params double[] values)
```

#### Parameters

`identity` `PlcIdentity`

The `PlcIdentity` of the new `PlcDoubleArray` to which the PLC array belongs.

`values` `Double[]`

The initial values of the new `PlcDoubleArray`.

#### Exceptions

`ArgumentException`

The `identity` does not refer to the `DWord`.

## ArgumentNullException

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

# PlcDoubleArray(PlcIdentity, Int32)

Initializes a new instance of the `PlcDoubleArray` class using the specified `identity` and `length`.

## C#

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

## Parameters

`identity` `PlcIdentity`

The `PlcIdentity` of the new `PlcDoubleArray` to which the PLC array belongs.

`length` `Int32`

The array length used to store the array values of the `PlcDoubleArray`.

## Exceptions

`ArgumentException`

The `identity` does not refer to the `DWord`.

`ArgumentNullException`

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

`ArgumentOutOfRangeException`

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

# PlcDoubleArray(PlcIdentity, PlcName, Double[])

Initializes a new instance of the `PlcDoubleArray` class using the specified `identity`, `name` and `values`.

## C#

```
public PlcDoubleArray(PlcIdentity identity, PlcName name, params double[] values)
```

## Parameters

`identity` `PlcIdentity`

The `PlcIdentity` of the new `PlcDoubleArray` to which the PLC array belongs.

`name` `PlcName`

The name of the array represented.

`values` `Double[]`

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

## Exceptions

### ArgumentException

The `identity` does not refer to the `DWord`.

### ArgumentNullException

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

## PlcDoubleArray(PlcIdentity, PlcName, Int32)

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

### C#

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

## Parameters

### identity PlcIdentity

The `PlcIdentity` of the new [PlcDoubleArray](#) 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 [PlcDoubleArray](#).

## Exceptions

### ArgumentException

The `identity` does not refer to the `DWord`.

### 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`.

## Methods

## GetElementCore(Int32)

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

## C#

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

### Parameters

`index` Int32

The zero-based index of the element to get.

### Returns

PlcDouble

The `PlcDouble` at the specified index.

## GetValueCore(PlcDeviceConnection)

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

## C#

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

### Parameters

`connection` PlcDeviceConnection

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

### Returns

Double[]

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, Double[])

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

### C#

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

## Parameters

**connection** PlcDeviceConnection

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

**value** Double[]

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.

# Table of Contents

<b>Constructors</b> .....	1
PlcDoubleArray(PlcDoubleArrayType) .....	1
PlcDoubleArray(PlcDoubleArrayType, Double[]) .....	1
PlcDoubleArray(PlcDoubleArrayType, PlcName, Double[]) .....	2
PlcDoubleArray(PlcIdentity, Double[]) .....	2
PlcDoubleArray(PlcIdentity, Int32) .....	3
PlcDoubleArray(PlcIdentity, PlcName, Double[]) .....	3
PlcDoubleArray(PlcIdentity, PlcName, Int32) .....	4
<b>Methods</b> .....	4
GetElementCore(Int32) .....	4
GetValueCore(PlcDeviceConnection) .....	5
RelocateCore(PlcAddress) .....	5
SetValueCore(PlcDeviceConnection, Double[]) .....	6

