

# PlcLRealArray Members

**Namespace:** IPS7Lnk.Advanced

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

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

## Constructors

### PlcLRealArray(PlcIdentity, Double[])

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

**C#**

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

#### Parameters

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

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

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

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

#### Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

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

### PlcLRealArray(PlcIdentity, Int32)

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

**C#**

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

#### Parameters

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

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

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

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

## Exceptions

### [ArgumentException](#)

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

### [ArgumentNullException](#)

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

### [ArgumentOutOfRangeException](#)

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

## PlcLRealArray(PlcIdentity, PlcName, Double[])

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

### C#

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

## Parameters

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

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

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

The name of the array represented.

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

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

## Exceptions

### [ArgumentException](#)

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

### [ArgumentNullException](#)

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

## PlcLRealArray(PlcIdentity, PlcName, Int32)

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

### C#

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

## Parameters

**identity** PlcIdentity

The PlcIdentity of the new PlcLRealArray 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 PlcLRealArray.

## Exceptions

ArgumentException

The identity does not refer to the LWord.

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.

# PlcLRealArray(PlcLRealArrayType)

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

**C#**

```
public PlcLRealArray(PlcLRealArrayType type)
```

## Parameters

**type** PlcLRealArrayType

The PlcLRealArrayType of the new PlcLRealArray to which the PLC array belongs.

## Exceptions

ArgumentNullException

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

# PlcLRealArray(PlcLRealArrayType, Double[])

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

**C#**

```
public PlcLRealArray(PlcLRealArrayType type, params double[] values)
```

## Parameters

**type** PlcLRealArrayType

The PlcLRealArrayType of the new PlcLRealArray to which the PLC array belongs.

**values** Double[]

The initial values of the new PlcLRealArray.

## Exceptions

ArgumentNullException

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

# PlcLRealArray(PlcLRealArrayType, PlcName, Double[])

Initializes a new instance of the PlcLRealArray class using the specified **type**, **name** and **values**.

## C#

```
public PlcLRealArray(PlcLRealArrayType type, PlcName name, params double[] values)
```

## Parameters

**type** PlcLRealArrayType

The PlcLRealArrayType of the new PlcLRealArray to which the PLC array belongs.

**name** PlcName

The name of the array represented.

**values** Double[]

The initial values of the new PlcLRealArray.

## Exceptions

ArgumentNullException

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

# Methods

## GetElementCore(Int32)

Retrieves the PlcLReal at the specified index.

## C#

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

## Parameters

`index Int32`

The zero-based index of the element to get.

## Returns

`PlcLReal`

The `PlcLReal` 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.

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