

PlcArray<T, TElement> Class

Namespace: IPS7Lnk.Advanced

Assemblies: IPS7LnkNet.Advanced.dll

Represents an abstract implementation of the [IPlcArray`2](#) interface.

C#

```
public abstract class PlcArray<T, TElement> : PlcValue<T[]>, IPlcArray<T, TElement>,
    IPlcValue<T[]>, IPlcArray, IPlcValue, IPlcSymbol, IPlcEntity, IPlcStatusProvider,
    IPlcRelocatable<IPlcValue>, IPlcRelocatable, ISupportInitialize, IEnumerable<T>, IEnumerable
where TElement : IPlcValue<T>
```

Inheritance [Object](#) > [PlcValue<T>](#) > [PlcArray<T, TElement>](#)

Derived

- [PlcBooleanArray](#)
- [PlcByteArray](#)
- [PlcCharArray](#)
- [PlcDoubleArray](#)
- [PlcInt16Array](#)
- [PlcInt32Array](#)
- [PlcInt64Array](#)
- [PlcLRealArray](#)
- [PlcRealArray](#)
- [PlcUInt16Array](#)
- [PlcUInt32Array](#)
- [PlcUInt64Array](#)

Implements [IPlcArray<T, t>](#), [IPlcValue<T>](#), [IPlcArray](#), [IPlcValue](#), [IPlcSymbol](#), [IPlcEntity](#), [IPlcStatusProvider](#), [IPlcRelocatable<IPlcValue>](#), [IPlcRelocatable](#), [ISupportInitialize](#), [IEnumerable<T>](#), [IEnumerable](#)

Constructors

Name	Description
PlcArray`2(PlcArrayType, PlcName,)	Initializes a new instance of the PlcArray`2 class using the specified type and name .
PlcArray`2(PlcArrayType,)	Initializes a new instance of the PlcArray`2 class using the specified type .

Properties

Name	Description
Item(Int32)	Gets the element at the specified index.
Length	Gets a 32-bit integer that represents the total number of elements within the array.
Value	Gets or sets the value assigned to the PLC value.

Methods

Name	Description
BeginInitCore	Signals the <code>PlcArray</code> '2 that initialization is started.
EndInitCore	Signals the <code>PlcValue</code> '1 that initialization is completed.
GetElement(Int32)	Retrieves the <code>TElement</code> at the specified index.
GetElementCore(Int32)	When implemented in a derived class, retrieves the <code>TElement</code> at the specified index.
GetEnumerator	Returns an enumerator that iterates through the array.
GetInstanceValue	Retrieves the value assigned to the PLC value.
GetValueCore(PlcDeviceConnection)	Retrieves the current value of the PLC value from a <code>IPlcDevice</code> using the <code>connection</code> specified.
SetValueCore(PlcDeviceConnection,)	Stores the <code>value</code> in the <code>IPlcDevice</code> assigned to the <code>connection</code> specified.
ToString	Converts the array to its string representation.

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