

# PlcInt64ArrayType Class

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll

Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 64-bit signed integer values ([Int64](#)).

**C#**

```
public class PlcInt64ArrayType : PlcArrayType, IPlcSymbol, IPlcEntity,
    IPlcRelocatable<PlcType>, IPlcRelocatable
```

**Inheritance** [Object](#) > [PlcType](#) > [PlcArrayType](#) > [PlcInt64ArrayType](#)

**Implements** [IPlcSymbol](#), [IPlcEntity](#), [IPlcRelocatable<PlcType>](#), [IPlcRelocatable](#)

## Remarks

While a PLC array type of this type represents an array of [Int64](#) values, all PLC operations performed using this class are done using the [LWord](#). A PLC developer knows an array of this type as an ARRAY OF LINT.

## Fields

| Name                      | Description                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">MaxLength</a> | Specifies the maximum value that can be used for the <a href="#">Length</a> property. (Inherited from <a href="#">PlcType</a> ) |
| <a href="#">MinLength</a> | Specifies the minimum value that can be used for the <a href="#">Length</a> property. (Inherited from <a href="#">PlcType</a> ) |

## Properties

| Name                          | Description                                                                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Address</a>       | Gets the start address of the <a href="#">PlcType</a> in the PLC. (Inherited from <a href="#">PlcType</a> )                                                        |
| <a href="#">DefaultValue</a>  | Gets the type dependent default value which can be assigned to an entity of the type represented.                                                                  |
| <a href="#">DefaultValue</a>  | Gets the type dependent default value which can be assigned to an entity of the type represented. (Inherited from <a href="#">PlcType</a> )                        |
| <a href="#">Description</a>   | Gets or sets more meaningful information about the type and its usage than only using the <a href="#">Name</a> property. (Inherited from <a href="#">PlcType</a> ) |
| <a href="#">EndAddress</a>    | Gets the end address of the <a href="#">PlcType</a> in the PLC. (Inherited from <a href="#">PlcType</a> )                                                          |
| <a href="#">FrameworkType</a> | Gets the concrete .NET framework type used when working with the <a href="#">PlcType</a> . (Inherited from <a href="#">PlcType</a> )                               |

| Name           | Description                                                                                                                                                                           |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HasElementType | Gets a value indicating whether the current <b>PlcType</b> encompasses another type this is the case when the current <b>PlcType</b> is an array.<br>(Inherited from <b>PlcType</b> ) |
| Identity       | Gets the identity of the <b>PlcType</b> in the PLC.<br>(Inherited from <b>PlcType</b> )                                                                                               |
| IsAbsolute     | Gets a value indicating whether the <b>PlcType</b> does absolutely refer to a PLC resource.<br>(Inherited from <b>PlcType</b> )                                                       |
| IsArray        | Gets a value indicating whether the framework <b>Type</b> of the <b>PlcType</b> is an array.<br>(Inherited from <b>PlcType</b> )                                                      |
| IsClass        | Gets a value indicating whether the framework <b>Type</b> of the <b>PlcType</b> is a class; that is, not a value type or interface.<br>(Inherited from <b>PlcType</b> )               |
| Layout         | Gets the characteristics to use when aligning the <b>Members</b> of the <b>PlcType</b> .<br>(Inherited from <b>PlcType</b> )                                                          |
| Length         | Gets a 32-bit integer that represents the total number of elements that can be stored in a value of the type.<br>(Inherited from <b>PlcType</b> )                                     |
| Members        | Gets the members associated with the PLC type.<br>(Inherited from <b>PlcType</b> )                                                                                                    |
| Name           | Gets the name of the PLC type represented.<br>(Inherited from <b>PlcType</b> )                                                                                                        |
| RelativeType   | Gets the <b>PlcType</b> from that this <b>PlcType</b> has been absolutely defined.<br>(Inherited from <b>PlcType</b> )                                                                |
| Size           | Gets a 32-bit integer that represents the total number of bytes required to store a value of the type within the PLC memory.<br>(Inherited from <b>PlcType</b> )                      |
| SizeInBits     | Gets a 32-bit integer that represents the total number of bits required to store a value of the type within the PLC memory.<br>(Inherited from <b>PlcType</b> )                       |
| TypeCode       | Gets the <b>PlcTypeCode</b> of the PLC type represented.<br>(Inherited from <b>PlcType</b> )                                                                                          |

## Methods

| Name                  | Description                                                                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| CreateEntity          | Creates a new <b>IPlcEntity</b> object which represents a concrete accessible entity of this <b>PlcType</b> .                                          |
| CreateEntity          | Creates a new <b>IPlcEntity</b> object which represents a concrete accessible entity of this <b>PlcType</b> .<br>(Inherited from <b>PlcType</b> )      |
| CreateEntity          | Creates a new <b>IPlcEntity</b> object which represents a concrete accessible entity of this <b>PlcType</b> .<br>(Inherited from <b>PlcArrayType</b> ) |
| Equals(Object)        | Determines whether the specified <b>other</b> is equal to this <b>PlcType</b> .<br>(Inherited from <b>PlcType</b> )                                    |
| Equals(PlcType)       | Determines whether the specified <b>other</b> is equal to this <b>PlcType</b> .<br>(Inherited from <b>PlcType</b> )                                    |
| GetElementType(Int32) | Retrieves the <b>PlcType</b> object encompassed or referred to by the current array type.<br>(Inherited from <b>PlcType</b> )                          |

| Name                                 | Description                                                                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GetHashCode                          | Retrieves a hash code for this <b>PlcType</b> .<br>(Inherited from <b>PlcType</b> )                                                                                                               |
| GetRawType(PlcTypeCode)              | Retrieves the according <b>PlcRawType</b> for the <b>typeCode</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                                  |
| GetRawType(Type)                     | Retrieves the according <b>PlcRawType</b> for the <b>type</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                                      |
| GetSize(PlcRawType)                  | Retrieves the according size for the <b>rawType</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                                                |
| GetSize(PlcRawType, Boolean)         | Retrieves the according size (optionally in bytes or bits) for the <b>rawType</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                  |
| GetSize(PlcTypeCode)                 | Retrieves the according size for the <b>typeCode</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                                               |
| GetSize(PlcTypeCode, Boolean)        | Retrieves the according size (optionally in bytes or bits) for the <b>typeCode</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                 |
| GetSize(Type)                        | Retrieves the according size for the <b>type</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                                                   |
| GetSize(Type, Boolean)               | Retrieves the according size (optionally in bytes or bits) for the <b>type</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                     |
| GetSupportedRawTypes(PlcTypeCode)    | Retrieves the <b>PlcRawType</b> members supported by the <b>PlcTypeCode</b> specified by <b>typeCode</b> .<br>(Inherited from <b>PlcType</b> )                                                    |
| GetSupportedRawTypes(Type)           | Retrieves the <b>PlcRawType</b> members supported by the <b>PlcTypeCode</b> of the <b>Type</b> specified by <b>type</b> .<br>(Inherited from <b>PlcType</b> )                                     |
| GetType(PlcTypeCode)                 | Retrieves the according framework <b>Type</b> for the <b>typeCode</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                              |
| GetTypeCode(Type)                    | Retrieves the according <b>PlcTypeCode</b> for the framework <b>Type</b> specified.<br>(Inherited from <b>PlcType</b> )                                                                           |
| IsSupported(PlcTypeCode, PlcRawType) | Determines whether the specified <b>rawType</b> can be used to address the PLC memory to access data of the <b>PlcTypeCode</b> specified by <b>typeCode</b> .<br>(Inherited from <b>PlcType</b> ) |
| IsSupportedArrayType(PlcTypeCode)    | Determines whether the <b>PlcTypeCode</b> specified by <b>typeCode</b> can be also used to access the PLC memory by an array of that <b>PlcTypeCode</b> .<br>(Inherited from <b>PlcType</b> )     |
| MakeAbsoluteType(PlcIdentity)        | Retrieves the absolute <b>PlcType</b> using the <b>PlcIdentity</b> specified by <b>identity</b> .<br>(Inherited from <b>PlcType</b> )                                                             |
| MakeArrayType                        | Returns a <b>PlcType</b> object representing a one-dimensional array of the current type, with a length of zero.<br>(Inherited from <b>PlcType</b> )                                              |

| Name                                                                 | Description                                                                                                                                                                  |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MakeArrayType(Int32)                                                 | Returns a <a href="#">PlcType</a> object representing an array of the current type, with the specified <a href="#">length</a> .<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Int32)                                                            | Retrieves the according <a href="#">PlcInt64ArrayType</a> which matches the supplied type metadata.                                                                          |
| Of(PlcIdentity, Int32)                                               | Retrieves the according <a href="#">PlcInt64ArrayType</a> which matches the supplied type metadata.                                                                          |
| Of(PlcIdentity, PlcName, Int32)                                      | Retrieves the according <a href="#">PlcInt64ArrayType</a> which matches the supplied type metadata.                                                                          |
| Of(PlcTypeCode)                                                      | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity)                                         | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, Int32)                                  | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcName)                                | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcName, Int32)                         | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcName, PlcTypeLayout, IEnumerable)    | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcName, PlcTypeLayout, IPlcMemberInfo) | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcTypeLayout, IEnumerable)             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcIdentity, PlcTypeLayout, IPlcMemberInfo)          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcTypeLayout, IEnumerable)                          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, PlcTypeLayout, IPlcMemberInfo)                       | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, Type)                                                | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, Type, Int32)                                         | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |
| Of(PlcTypeCode, Type, Int32, PlcTypeLayout, IEnumerable)             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                       |

| Name                                                                              | Description                                                                                                                            |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Of(PlcTypeCode, Type, Int32, PlcTypeLayout, IPlcMemberInfo)                       | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity)                                                | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, Int32)                                         | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, Int32, PlcTypeLayout, IEnumerable)             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, Int32, PlcTypeLayout, IPlcMemberInfo)          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName)                                       | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName, Int32)                                | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName, Int32, PlcTypeLayout, IEnumerable)    | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName, Int32, PlcTypeLayout, IPlcMemberInfo) | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName, PlcTypeLayout, IEnumerable)           | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcName, PlcTypeLayout, IPlcMemberInfo)        | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcTypeLayout, IEnumerable)                    | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcIdentity, PlcTypeLayout, IPlcMemberInfo)                 | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcTypeLayout, IEnumerable)                                 | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(PlcTypeCode, Type, PlcTypeLayout, IPlcMemberInfo)                              | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type)                                                                          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity)                                                             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, Int32)                                                      | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |

| Name                                                          | Description                                                                                                                            |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Of(Type, PlcIdentity, PlcName)                                | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, PlcName, Int32)                         | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, PlcName, PlcTypeLayout, IEnumerable)    | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, PlcName, PlcTypeLayout, IPlcMemberInfo) | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, PlcTypeLayout, IEnumerable)             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of(Type, PlcIdentity, PlcTypeLayout, IPlcMemberInfo)          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1                                                          | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity)                                             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, Int32)                                      | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcName)                                    | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcName, Int32)                             | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcName, PlcTypeLayout, IEnumerable)        | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcName, PlcTypeLayout, IPlcMemberInfo)     | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcTypeLayout, IEnumerable)                 | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcIdentity, PlcTypeLayout, IPlcMemberInfo)              | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |
| Of`1(PlcTypeLayout, IEnumerable)                              | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> ) |

| Name                                | Description                                                                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Of`1(PlcTypeLayout, IPlcMemberInfo) | Retrieves the according <a href="#">PlcType</a> which matches the supplied type metadata.<br>(Inherited from <a href="#">PlcType</a> )                                            |
| Relocate(Int32)                     | Relocates the <a href="#">PlcType</a> using the specified offset.<br>(Inherited from <a href="#">PlcType</a> )                                                                    |
| Relocate(Int32, Int32)              | Relocates the <a href="#">PlcType</a> using the specified offset.<br>(Inherited from <a href="#">PlcType</a> )                                                                    |
| Relocate(Int32, Int32, Int32)       | Relocates the <a href="#">PlcType</a> using the specified offset.<br>(Inherited from <a href="#">PlcType</a> )                                                                    |
| Relocate(PlcAddress)                | Relocates the <a href="#">PlcType</a> using the specified <a href="#">address</a> .<br>(Inherited from <a href="#">PlcType</a> )                                                  |
| ToString                            | Returns a <a href="#">String</a> representing the framework type name and the address range of the current <a href="#">PlcType</a> .<br>(Inherited from <a href="#">PlcType</a> ) |







# Table of Contents

|                         |   |
|-------------------------|---|
| Remarks .....           | 1 |
| <b>Fields</b> .....     | 1 |
| <b>Properties</b> ..... | 1 |
| <b>Methods</b> .....    | 2 |