

# PlcWordAddress Class

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll

Represents a word address which refers to a specific data area stored within a programmable logic controller (PLC).

**C#**

```
[Serializable]
public class PlcWordAddress : PlcAddress, IComparable, ISerializable,
    IEquatable<PlcAddress>, IComparable<PlcAddress>, IEquatable<PlcWordAddress>,
    IComparable<PlcWordAddress>
```

**Inheritance** [Object](#) > [PlcIdentity](#) > [PlcAddress](#) > [PlcWordAddress](#)

**Attributes** [SerializableAttribute](#)

**Implements** [IComparable](#), [Serialization.ISerializable](#), [IEquatable<PlcAddress>](#),  
[IComparable<PlcAddress>](#), [IEquatable<PlcWordAddress>](#), [IComparable<PlcWordAddress>](#)

## Constructors

| Name                                                                                            | Description                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">PlcWordAddress(PlcOperand, Int32)</a>                                               | Initializes a new instance of the <a href="#">PlcWordAddress</a> class using the specified <a href="#">operand</a> and <a href="#">byteNumber</a> .                                     |
| <a href="#">PlcWordAddress(PlcOperandType, Int32)</a>                                           | Initializes a new instance of the <a href="#">PlcWordAddress</a> class using the specified <a href="#">operandType</a> and <a href="#">byteNumber</a> .                                 |
| <a href="#">PlcWordAddress(PlcOperandType, Int32, Int32)</a>                                    | Initializes a new instance of the <a href="#">PlcWordAddress</a> class using the specified <a href="#">operandType</a> , <a href="#">operandNumber</a> and <a href="#">byteNumber</a> . |
| <a href="#">PlcWordAddress(Serialization.SerializationInfo, Serialization.StreamingContext)</a> | Initializes a new instance of the <a href="#">PlcWordAddress</a> class with serialized data.                                                                                            |

## Fields

| Name                             | Description                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">MaxBitNumber</a>     | Specifies the maximum value that can be assigned to the <a href="#">BitNumber</a> property. (Inherited from <a href="#">PlcAddress</a> )     |
| <a href="#">MaxByteNumber</a>    | Specifies the maximum value that can be assigned to the <a href="#">ByteNumber</a> property. (Inherited from <a href="#">PlcAddress</a> )    |
| <a href="#">MaxOperandNumber</a> | Specifies the maximum value that can be assigned to the <a href="#">OperandNumber</a> property. (Inherited from <a href="#">PlcAddress</a> ) |
| <a href="#">MinBitNumber</a>     | Specifies the minimum value that can be assigned to the <a href="#">BitNumber</a> property. (Inherited from <a href="#">PlcAddress</a> )     |

| Name             | Description                                                                                                                                     |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| MinByteNumber    | Specifies the minimum value that can be assigned to the <a href="#">ByteNumber</a> property.<br>(Inherited from <a href="#">PlcAddress</a> )    |
| MinOperandNumber | Specifies the minimum value that can be assigned to the <a href="#">OperandNumber</a> property.<br>(Inherited from <a href="#">PlcAddress</a> ) |

## Properties

| Name           | Description                                                                                                                                      |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| BitNumber      | Gets the bit number part of the address, which defines to which bit the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )          |
| ByteNumber     | Gets the byte number part of the address, which defines to which byte the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )        |
| Operand        | Gets the operand part of the address, which defines to which memory block the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )    |
| OperandNumber  | Gets the operand number part of the address, which defines to which operand the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )  |
| OperandType    | Gets the type of operand to which the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )                                            |
| OriginalString | Gets the original string from that the address was created.<br>(Inherited from <a href="#">PlcAddress</a> )                                      |
| RawType        | Gets the raw type of to which the address refers.<br>(Inherited from <a href="#">PlcAddress</a> )                                                |
| Standard       | Gets a value indicating which <a href="#">PlcOperandStandard</a> was used to create the address.<br>(Inherited from <a href="#">PlcAddress</a> ) |

## Methods

| Name                      | Description                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| CompareTo(Object)         | Compares the current <a href="#">PlcWordAddress</a> with the <b>other</b> .                                                                   |
| CompareTo(Object)         | Compares the current <a href="#">PlcIdentity</a> with the <b>other</b> .<br>(Inherited from <a href="#">PlcIdentity</a> )                     |
| CompareTo(Object)         | Compares the current <a href="#">PlcAddress</a> with the <b>other</b> .<br>(Inherited from <a href="#">PlcAddress</a> )                       |
| CompareTo(PlcAddress)     | Compares the current <a href="#">PlcAddress</a> with another <a href="#">PlcAddress</a> .<br>(Inherited from <a href="#">PlcAddress</a> )     |
| CompareTo(PlcWordAddress) | Compares the current <a href="#">PlcWordAddress</a> with another <a href="#">PlcWordAddress</a> .                                             |
| Distinct(IEnumerable)     | Returns distinct addresses from the sequence.<br>(Inherited from <a href="#">PlcAddress</a> )                                                 |
| Equals(Object)            | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcWordAddress</a> .                                               |
| Equals(Object)            | Determines whether the specified <b>other</b> is equal to this <a href="#">PlcIdentity</a> .<br>(Inherited from <a href="#">PlcIdentity</a> ) |

| Name                                                                           | Description                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equals(Object)                                                                 | Determines whether the specified <b>other</b> is equal to this <b>PlcAddress</b> .<br>(Inherited from <b>PlcAddress</b> )                                                                                          |
| Equals(PlcAddress)                                                             | Determines whether the specified <b>other</b> is equal to this <b>PlcAddress</b> .<br>(Inherited from <b>PlcAddress</b> )                                                                                          |
| Equals(PlcWordAddress)                                                         | Determines whether the specified <b>other</b> is equal to this <b>PlcWordAddress</b> .                                                                                                                             |
| Exclusive                                                                      | Retrieves a new <b>PlcAddress</b> which points to the next address within the same <b>RawType</b> specific address sequence.<br>(Inherited from <b>PlcAddress</b> )                                                |
| Exclusive(PlcRawType)                                                          | Retrieves a new <b>PlcAddress</b> which points to the next address within the same <b>RawType</b> specific address sequence regarding the <b>rawType</b> specified.<br>(Inherited from <b>PlcAddress</b> )         |
| GetHashCode                                                                    | Retrieves a hash code for this <b>PlcWordAddress</b> .                                                                                                                                                             |
| GetHashCode                                                                    | Retrieves a hash code for this <b>PlcIdentity</b> .<br>(Inherited from <b>PlcIdentity</b> )                                                                                                                        |
| GetHashCode                                                                    | Retrieves a hash code for this <b>PlcAddress</b> .<br>(Inherited from <b>PlcAddress</b> )                                                                                                                          |
| GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext) | Sets the <b>Serialization.SerializationInfo</b> with information about the exception.<br>(Inherited from <b>PlcIdentity</b> )                                                                                      |
| GetObjectData(Serialization.SerializationInfo, Serialization.StreamingContext) | Sets the <b>Serialization.SerializationInfo</b> with information about the exception.<br>(Inherited from <b>PlcAddress</b> )                                                                                       |
| Group(IEnumerable)                                                             | Groups the addresses of the sequence according to their <b>Operand</b> .<br>(Inherited from <b>PlcAddress</b> )                                                                                                    |
| Max(IEnumerable)                                                               | Returns the maximum address in a sequence of <b>PlcAddress</b> instances.<br>(Inherited from <b>PlcAddress</b> )                                                                                                   |
| Max(PlcAddress)                                                                | Returns the maximum address in a sequence of <b>PlcAddress</b> instances.<br>(Inherited from <b>PlcAddress</b> )                                                                                                   |
| Min(IEnumerable)                                                               | Returns the minimum address in a sequence of <b>PlcAddress</b> instances.<br>(Inherited from <b>PlcAddress</b> )                                                                                                   |
| Min(PlcAddress)                                                                | Returns the minimum address in a sequence of <b>PlcAddress</b> instances.<br>(Inherited from <b>PlcAddress</b> )                                                                                                   |
| Offset(Int32)                                                                  | Creates and returns an adjusted copy of the <b>PlcAddress</b> class. The copy is adjusted by the specified amount. The original <b>PlcAddress</b> class remains unmodified.<br>(Inherited from <b>PlcAddress</b> ) |
| Offset(Int32, Int32)                                                           | Creates and returns an adjusted copy of the <b>PlcAddress</b> class. The copy is adjusted by the specified amount. The original <b>PlcAddress</b> class remains unmodified.<br>(Inherited from <b>PlcAddress</b> ) |

| Name                                           | Description                                                                                                                                                                                                                                   |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Offset(Int32, Int32, Int32)                    | Creates and returns an adjusted copy of the <a href="#">PlcAddress</a> class. The copy is adjusted by the specified amount. The original <a href="#">PlcAddress</a> class remains unmodified.<br>(Inherited from <a href="#">PlcAddress</a> ) |
| Parse(String)                                  | Converts an address string to a <a href="#">PlcAddress</a> instance.<br>(Inherited from <a href="#">PlcAddress</a> )                                                                                                                          |
| ToString                                       | Converts the name to its string representation.<br>(Inherited from <a href="#">PlcIdentity</a> )                                                                                                                                              |
| ToString                                       | Converts the address to its string representation.<br>(Inherited from <a href="#">PlcAddress</a> )                                                                                                                                            |
| ToString(PlcOperandStandard)                   | Converts the address to its string representation using the specified <b>standard</b> .<br>(Inherited from <a href="#">PlcAddress</a> )                                                                                                       |
| ToString(PlcOperandStandard, PlcAddressFormat) | Converts the address to its string representation using the specified <b>standard</b> and <b>format</b> .<br>(Inherited from <a href="#">PlcAddress</a> )                                                                                     |
| TryParse(String, PlcAddress@)                  | Determines whether a string is a valid address.<br>(Inherited from <a href="#">PlcAddress</a> )                                                                                                                                               |

## Operators

| Name                                                  | Description                                                                                                                                                                                                     |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| op_Equality(PlcAddress, PlcAddress)                   | Returns a value indicating whether two instance of <a href="#">PlcAddress</a> are equal.<br>(Inherited from <a href="#">PlcAddress</a> )                                                                        |
| op_Equality(PlcIdentity, PlcIdentity)                 | Returns a value indicating whether two instance of <a href="#">PlcIdentity</a> are equal.<br>(Inherited from <a href="#">PlcIdentity</a> )                                                                      |
| op_Equality(PlcWordAddress, PlcWordAddress)           | Returns a value indicating whether two instance of <a href="#">PlcWordAddress</a> are equal.                                                                                                                    |
| op_GreaterThan(PlcAddress, PlcAddress)                | Determines whether the first specified <a href="#">PlcAddress</a> object is greater than the second specified <a href="#">PlcAddress</a> object.<br>(Inherited from <a href="#">PlcAddress</a> )                |
| op_GreaterThan(PlcIdentity, PlcIdentity)              | Determines whether the first specified <a href="#">PlcIdentity</a> object is greater than the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )             |
| op_GreaterThan(PlcWordAddress, PlcWordAddress)        | Determines whether the first specified <a href="#">PlcWordAddress</a> object is greater than the second specified <a href="#">PlcWordAddress</a> object.                                                        |
| op_GreaterThanOrEqual(PlcAddress, PlcAddress)         | Determines whether the first specified <a href="#">PlcAddress</a> object is greater than or equal to the second specified <a href="#">PlcAddress</a> object.<br>(Inherited from <a href="#">PlcAddress</a> )    |
| op_GreaterThanOrEqual(PlcIdentity, PlcIdentity)       | Determines whether the first specified <a href="#">PlcIdentity</a> object is greater than or equal to the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> ) |
| op_GreaterThanOrEqual(PlcWordAddress, PlcWordAddress) | Determines whether the first specified <a href="#">PlcWordAddress</a> object is greater than or equal to the second specified <a href="#">PlcWordAddress</a> object.                                            |

| Name                                               | Description                                                                                                                                                                                        |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| op_Implicit(Advanced.PlcAddress)                   | Converts a string formatted as address to an <a href="#">PlcAddress</a> object.<br>(Inherited from <a href="#">PlcAddress</a> )                                                                    |
| op_Implicit(Advanced.PlcIdentity)                  | Converts a string formatted as name to an <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )                                                                     |
| op_Implicit(Advanced.PlcWordAddress)               | Converts a string formatted as address to an <a href="#">PlcWordAddress</a> object.                                                                                                                |
| op_Inequality(PlcAddress, PlcAddress)              | Returns a value indicating whether two instances of <a href="#">PlcAddress</a> are not equal.<br>(Inherited from <a href="#">PlcAddress</a> )                                                      |
| op_Inequality(PlcIdentity, PlcIdentity)            | Returns a value indicating whether two instances of <a href="#">PlcIdentity</a> are not equal.<br>(Inherited from <a href="#">PlcIdentity</a> )                                                    |
| op_Inequality(PlcWordAddress, PlcWordAddress)      | Returns a value indicating whether two instances of <a href="#">PlcWordAddress</a> are not equal.                                                                                                  |
| op_LessThan(PlcAddress, PlcAddress)                | Determines whether the first specified <a href="#">PlcAddress</a> object is less than the second specified <a href="#">PlcAddress</a> object.<br>(Inherited from <a href="#">PlcAddress</a> )      |
| op_LessThan(PlcIdentity, PlcIdentity)              | Determines whether the first specified <a href="#">PlcIdentity</a> object is less than the second specified <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> )   |
| op_LessThan(PlcWordAddress, PlcWordAddress)        | Determines whether the first specified <a href="#">PlcWordAddress</a> object is less than the second specified <a href="#">PlcWordAddress</a> object.                                              |
| op_LessThanOrEqual(PlcAddress, PlcAddress)         | Determines whether the first specified <a href="#">PlcAddress</a> object is less than or equal to the second <a href="#">PlcAddress</a> object.<br>(Inherited from <a href="#">PlcAddress</a> )    |
| op_LessThanOrEqual(PlcIdentity, PlcIdentity)       | Determines whether the first specified <a href="#">PlcIdentity</a> object is less than or equal to the second <a href="#">PlcIdentity</a> object.<br>(Inherited from <a href="#">PlcIdentity</a> ) |
| op_LessThanOrEqual(PlcWordAddress, PlcWordAddress) | Determines whether the first specified <a href="#">PlcWordAddress</a> object is less than or equal to the second <a href="#">PlcWordAddress</a> object.                                            |



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