

General Specifications

NT336AJ
OPC Data Link Package for .NET



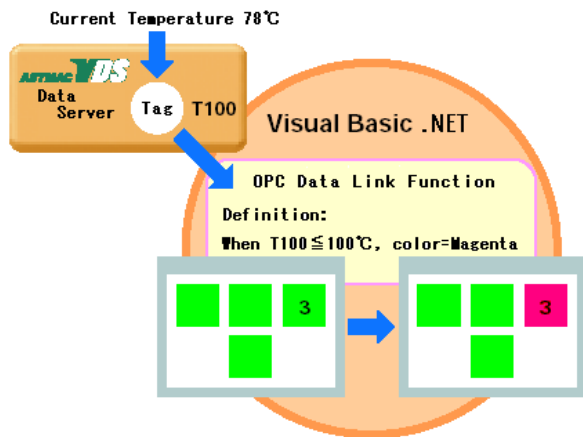
GS 34P02H51-01E

■ GENERAL

OPC Data Link Package for .NET is an optional package for linking various control properties in Microsoft Visual Studio (hereinafter referred to as Visual Studio) — Visual Basic or C# to control object properties on Versatile Data Server software (VDS) without using a program. This package consists of OPC Data Link Components and OPC Data Link Definition Addin.

A general-purpose interface or an OPC interface allows you to access the data server through Visual Basic .Net or C# .Net. A disadvantage of this approach is that it requires advanced programming skills. However, if you use this package, you can acquire data from the data server by setting only the property, and those data can be stored in the control property in the Windows form. In addition, you can also read/write data from the program code by using an extremely simple interface.

OPC — OLE for Process Control — is a worldwide industry standard using Microsoft Corporation's state-of-the-art DCOM/OLE/ActiveX technology intended for exchanging data between multiple programs in industry systems.



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Figure Overview

■ OPERATING ENVIRONMENT

The operating environment for this package supports VDS, GS 34P02A02-01E. When accessing the data server from a remote PC, the operating system of a remote PC also supports VDS, GS 34P02A-01E.

Each of the following software is needed for the development/runtime environment.

● Development Environment

Visual Studio 2017 + .NET Framework 4.6.2
Visual Studio 2015 + .NET Framework 4.6.2

● Runtime Environment

.NET Framework 4.6.2

■ FUNCTION SPECIFICATIONS

● OPC Data Link Functions

Data link functions for Visual Basic .Net and Visual C# .Net controls and data server controls are realized by OPC data link components. This component is a windows form component, operates in Windows form and offers OPC DA (Data Access) client-side functionality for .Net applications.

Item	Specifications
Interface	OPC DA2. 0a (*1)
Data read	Notification of data changes from OPC server
Data write	Asynchronous write (*2)
Number of OPC servers connected	1/component
Remote server connection	Available

- *1: Can also be connected to the VDS data server and the OPC server of the FCN/FCJ.
- *2: Asynchronous data write is performed by calling up methods from the OPC data link components.

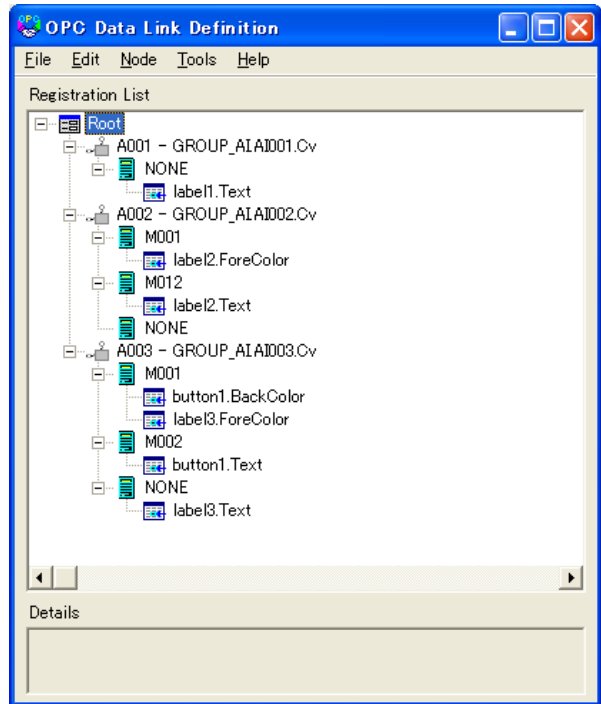
● **Modify Functions**

Acquired data that can be processed and distributed to controls.

Function	Description
None	No conversion
Numeral to Color	Converts numeric values to color codes
Numeral to Text	Converts numeric values to character-string data
Numeral to Boolean	Converts numeric values to results having one of two values compared with specified values
Text to Color	Converts character-string data to color codes
Text to Numeral	Converts character-string data to numeric values
Text to Text	Converts character-string data to other character-string data
Text to Boolean	Converts character-string data to results having one of two values compared with specified character-string data
Boolean to Color	Converts Boolean values to color codes
Boolean to Numeral	Converts Boolean values to numeric values
Boolean to Text	Converts Boolean values to character-string data
Invert Boolean	Inverts Boolean values
Scale Conversion	Converts scale factor of numeric value
Numeral to Alarm color	Checks (HH, HI, NR, LO, LL) alarms and converts them to specified color codes
Numeral to Alarm text	Checks (HH, HI, NR, LO, LL) alarms and converts them to text

● **OPC Data Link Define Functions**

Data links are defined by OPC Data Link Definition Addin. This Addin is a Visual Studio addin that allows data acquisition from the OPC server, function modification and data distribution to a control without using a program. Data link designations can be intuitively defined by selecting browsed OPC data and controls. The defined information is stored in an XML file referenced by the OPC data link component.



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Figure OPC Data Link Definition Addin

■ **METHOD OF SOFTWARE SUPPLY**

● **Software Media**

The OPC Data Link Package for .Net programs and the package help file are contained in the VDS Software Media (Model: NT201AJ).

● **OPC Data Link Package for .Net License**

An order ID sheet with the order ID and password comes with the NT336AJ package. After the purchase, access the specified Yokogawa website page and enter the order ID number and password to obtain a key code corresponding to the relevant software. Use this key code when installing the OPC Data Link Package for .Net program.

■ MODELS AND SUFFIX CODES

● Software Media

		Description
Model	NT201AJ	VDS software media
Suffix Codes	-P	Programs (including electronic documents)
	C	DVD-ROM
	1	Always 1
	1	Always 1
	E	English version

● OPC Data Link Package for .Net License

		Description
Model	NT336AJ	OPC Data Link Package for .Net
Suffix Codes	-L	License
	W	Delivery of order ID sheet
	1	Always 1
	1	Always 1
	A	Standard

Note: One OPC Data Link Package for .Net license is needed for each PC.

■ ORDERING INFORMATION

Specify model and suffix codes when ordering.

■ RELATED DOCUMENTS

VDS GS 34P02A02-01E
 FCN/FCJ OPC Server for Windows GS 34P02Q61-01E

■ TRADEMARKS

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