General Specifications

Model VP6B1550, VP6B1650
OPC Communication Package
(for UGS/UGS2)

CENTUM VP

GS 33J20C40-01EN

[Release 6]

■ GENERAL

This package provides Unified Gateway Station (UGS/UGS2) with a function to communicate with subsystem controllers via an OPC interface. The UGS/UGS2 can be connected with both OPC DA servers and OPC A&E servers.

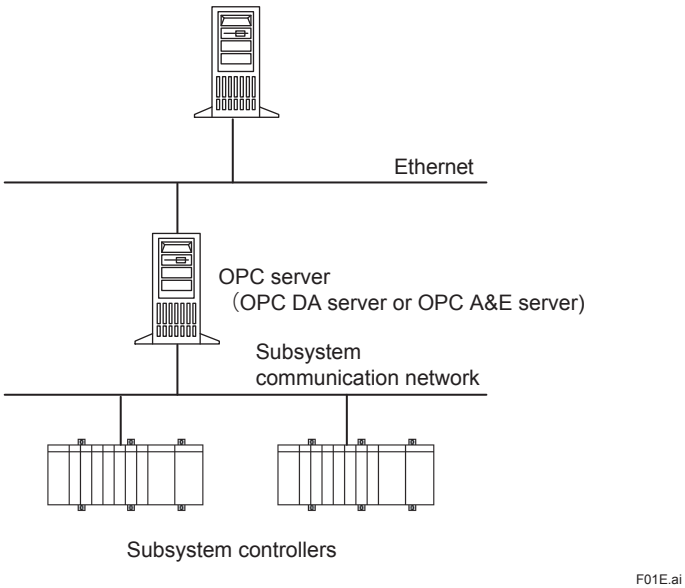

Figure System configuration example

YOKOGAWA

Yokogawa Electric Corporation
2-9-32, Nakacho, Musashino-shi, Tokyo, 180-8750 Japan
Tel.: 81-422-52-5634 Fax.: 81-422-52-9802

GS 33J20C40-01EN

4th Edition Sep. 14, 2016 (YK)

■ FUNCTIONAL SPECIFICATIONS

● Communication with subsystem controllers

OPC DA server
Subsystem controller data is assigned to the UGS/UGS2 function blocks via an OPC DA server and referred to or set from HIS and FCS. The connection status among the UGS/UGS2 and controllers can also be monitored.

OPC A&E server
Subsystem controller alarms and other information are notified to UGS/UGS2 as OPC A&E events via an OPC A&E server.
A UGS/UGS2 converts the OPC A&E events into the CENTUM VP message format, and notify them to HIS.

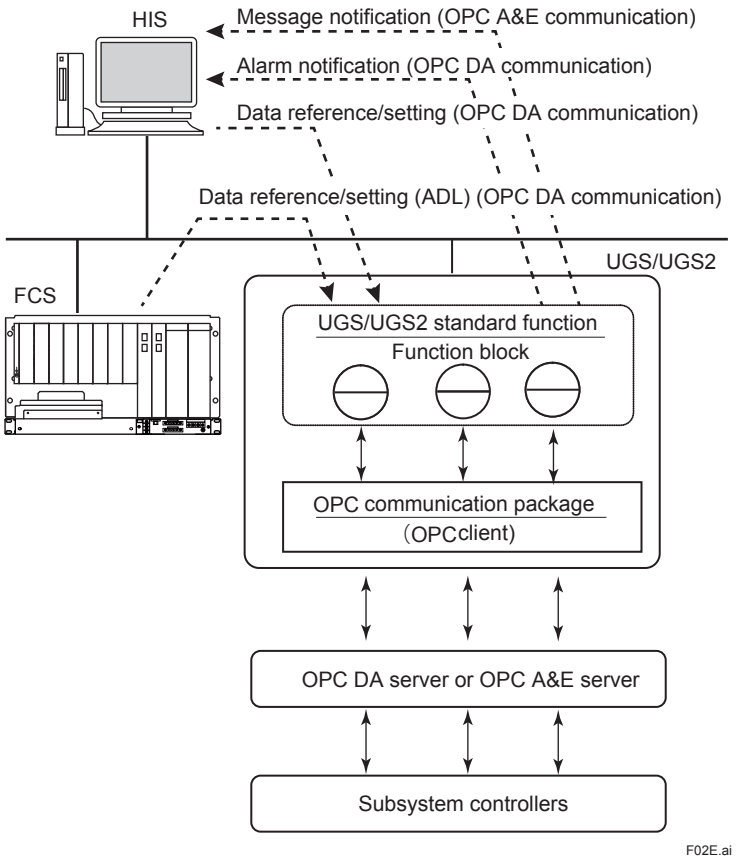

Figure Communication with subsystem controllers

● Application capacity

The total of 32 OPC DA servers and OPC A&E servers can be connected for communication with the UGS/UGS2 by the following specifications.

OPC DA server

Number of OPC DA servers:
Max. 16
Number of data items that can be defined:
Max. 2,000,000 data (for a single UGS configuration) (*1)
Max. 1,000,000 data (for a dual-redundant UGS configuration) (*1) (*2)
Max. 600,000 data (for UGS2) (*1) (*2)
Number of data items for communication with controllers:
Max. 750,000 data (for UGS) (*1) (*2) (*3)
Max. 450,000 data (for UGS2) (*1) (*2) (*3)
(The sum of the data items of subsystem controllers)
Data update period: 100 ms to 1 hour
Data acquisition: Max. 6,400 data sec (*1) (*2) (Number of data acquired from subsystem controllers)
Data setting: Max. 640 data sec (*1) (*2) (Number of data set on UGS/UGS2 from HIS and FCS)
OPC DA specification: OPC Data Access Custom Interface Specification Version 2.05A

*1: The number of data includes those from other UGS/UGS2's communication packages.
*2: It depends on the application conditions.
*3: The UGS/UGS2 accesses the controllers' data by assigning each of the controller's data into the data items in the UGS/UGS2's function block(s). Among all the data items that can be defined, those which do not communicate with controllers can be used as a data buffer for the data which are set by other sources such as FCS. See below formula for a quick glance.
Number of data items that can be defined
= Number of data items for communication with controllers + Number of data items used as a data buffer

OPC A&E server

Number of OPC A&E servers:
Max. 16
Event type: Simple, Condition, Tracking Message
Number of Events: Max. 44
The number of event categories which can set up filters:
Max.100 for each OPC A&E server
OPC A&E specification: OPC Alarms and Events Custom Interface Specification Version 1.02

■ OPERATING ENVIRONMENT

For VP6B1550, hardware and software requirements comply with VP6B1500 Unified Gateway Station (UGS) Standard Function.

For VP6B1650, hardware and software requirements comply with VP6B1600 Unified Gateway Station (UGS2) Standard Function.

■ MODELS AND SUFFIX CODES

OPC Communication Package (for UGS)

		Description
Model	VP6B1550	OPC Communication Package (for UGS)
Suffix Codes	-V	Software license
	1	Always 1
	1	English version

Note: When using UGS in a dual-redundant configuration, order two licenses of the VP6B1550 package.

OPC Communication Package (for UGS2)

		Description
Model	VP6B1650	OPC Communication Package (for UGS2)
Suffix Codes	-V	Software license
	1	Always 1
	1	English version

Note: Even when using UGS2 in a dual-redundant configuration, only one license of the VP6B1650 package is required.

■ ORDERING INFORMATION

Specify model and suffix codes.

■ TRADEMARKS

- CENTUM is the registered trademark of Yokogawa Electric Corporation.
- Other company and product names appearing in this document are trademarks or registered trademarks of their respective holders.