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.

![System configuration example](image-url)
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)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP6B1550</td>
<td>OPC Communication Package (for UGS)</td>
</tr>
<tr>
<td>-V</td>
<td>Software license</td>
</tr>
<tr>
<td>1</td>
<td>Always 1</td>
</tr>
<tr>
<td>1</td>
<td>English version</td>
</tr>
</tbody>
</table>

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

**OPC Communication Package (for UGS2)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP6B1650</td>
<td>OPC Communication Package (for UGS2)</td>
</tr>
<tr>
<td>-V</td>
<td>Software license</td>
</tr>
<tr>
<td>1</td>
<td>Always 1</td>
</tr>
<tr>
<td>1</td>
<td>English version</td>
</tr>
</tbody>
</table>

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.