

General Specifications

Models VP6B1591, VP6B1691
EtherNet/IP Communication
Package (for UGS/UGS2)



GS 33J20C60-01EN

[Release 6]

■ GENERAL

This package provides Unified Gateway Station (UGS/UGS2) with a function to communicate with EtherNet/IP protocol subsystem controllers.

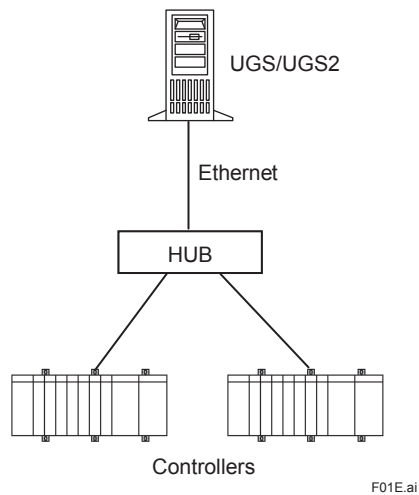


Figure System configuration

■ FUNCTIONAL SPECIFICATIONS

● Communication with subsystem controllers

Subsystem controller data is assigned to the UGS/UGS2 function blocks via EtherNet/IP communication and referred to or set from HIS and FCS. The connection status among the UGS/UGS2 and controllers can also be monitored by the HIS and FCS.

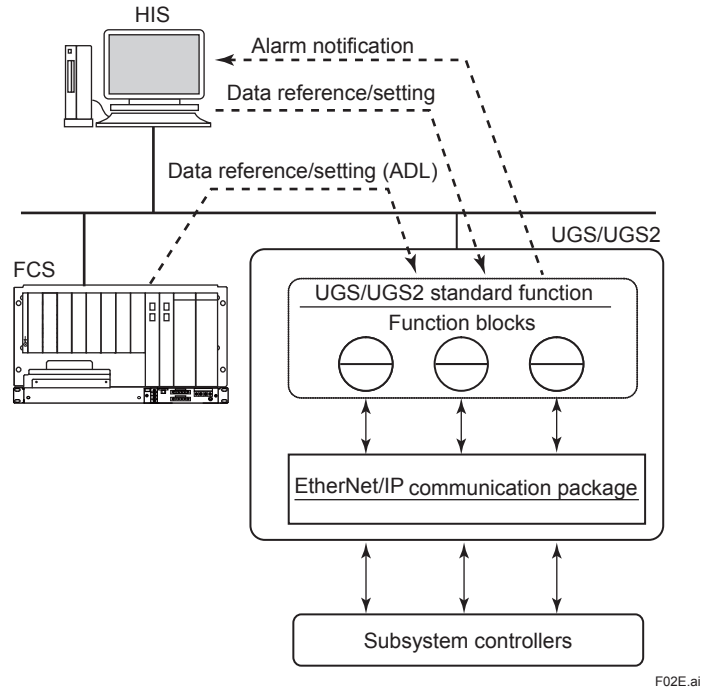


Figure Communication with subsystem controllers

● Application capacity

Number of controllers: Max. 256

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 (*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 the UGS2 from HIS and FCS)

Transmission protocol: TCP/IP CIP EtherNet/IP

CIP Service:

0x65 RegisterSession

0x6F Open connected session (Forward_Open: 0x54)

0x70 Read/write data using ASCII tag name (Data Table Read: 0x4C, Data Table Write: 0x4D)

Date type: BOOL, SINT, INT, DINT, and REAL

*1: The number of data includes those from other subsystem communication packages

*2: The number of data items varies depends on the application conditions.

*3: The UGS/UGS2 access 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 definable data items, 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 definable data items

= Number of data items for communication with controllers + Number of data items used as a data buffer

■ OPERATING ENVIRONMENT

For VP6B1591, hardware and software requirements comply with VP6B1500 Unified Gateway Station (UGS) Standard Function.

For VP6B1691, hardware and software requirements comply with VP6B1600 Unified Gateway Station (UGS2) Standard Function.

■ MODEL AND SUFFIX CODES

EtherNet/IP Communication Package (for UGS)

| | | Description |
|---------------------|----------|---|
| Model | VP6B1591 | EtherNet/IP Communication Package (for UGS) |
| Suffix Codes | -V | Software license |
| | 1 | Always 1 |
| | 1 | English version |

Note: When using the UGS in a dual-redundant configuration, two licenses of the VP6B1591 package are required.

EtherNet/IP Communication Package (for UGS2)

| | | Description |
|---------------------|----------|--|
| Model | VP6B1691 | EtherNet/IP Communication Package (for UGS2) |
| Suffix Codes | -V | Software license |
| | 1 | Always 1 |
| | 1 | English version |

Note: Even when using the UGS2 in a dual-redundant configuration, only one license of the VP6B1691 package is required.

■ ORDERING INFORMATION

Specify model and suffix codes.

■ TRADEMARKS

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