Siemens AG

SIE_TIAE_16
3/2025

TIA Portal Ethernet Driver

IMPORTANT

- The below Displays are no longer sold nor maintained by Pro-face. To reduce unplanned downtime due to aged hardware and to maximize your cyber security environment we recommend replacing your devices with a new, successor model. For details, please visit our homepage for "Recommended Substitution". Discontinued from GP-Pro EX 5.00 onwards: GP3000 Series, LT3000 Series, ST3000 Series, GP-4100 Series (Monochrome model), PL Series, PS3000/4000 Series, PE4000 Series.
- For details on the Displays supported by the driver, please check the "Connectable Devices" on our website.
  http://www.pro-face.com/trans/en/manual/1064.html

Introduction

This manual describes how to connect the Display and the External Device (target PLC).

In this manual, the connection procedure will be described by following the below sections:

1	System Configuration This section shows the types of External Devices which can be connected and SIO type.	☞"1 System Configuration" (page 3)
2	Selection of External Device Select a model (series) of the External Device to be connected and connection method.	☞"2 External Device Selection" (page 6)
3	Example of Communication Settings This section shows setting examples for communicating between the Display and the External Device.	☞"3 Communication Settings" (page 7)
4	Setup Items This section describes communication setup items on the Display. Set communication settings of the Display with GP-Pro Ex or in offline mode.	☞"4 Setup Items" (page 9)

Operation

1 System Configuration

The system configuration in the case when the External Device and the Display are connected is shown.

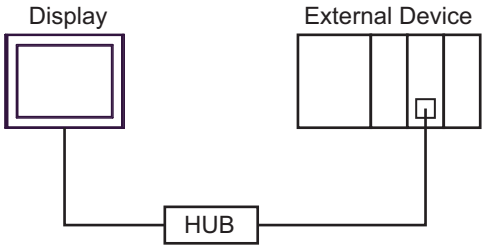
Series	CPU	Link I/F	SIO Type	Setting Example
SIMATIC S7-1200 Series	CPU 1211C □/□/□ CPU 1212C □/□/□ CPU 1214C □/□/□ CPU 1215C □/□/□ CPU 1217C □/□/□ CPU 1212FC □/□/□ CPU 1214FC □/□/□ CPU 1215FC □/□/□	Built-in port on CPU	Ethernet (TCP)	Setting Example 1 (page 7)
SIMATIC S7-1500 Series	CPU 1511-1 PN CPU 1511C-1 PN CPU 1512C-1 PN CPU 1513-1 PN CPU 1515-2 PN CPU 1516-3 PN/DP CPU 1517-3 PN/DP CPU 1518-4 PN/DP CPU 1518-4 PN/DP ODK CPU 1518-4 PN/DP MFP CPU 1511F-1 PN CPU 1513F-1 PN CPU 1515F-2 PN CPU 1516F-3 PN/DP CPU 1517F-3 PN/DP CPU 1518F-4 PN/DP CPU 1518F-4 PN/DP ODK CPU 1518F-4 PN/DP MFP CPU 1511T-1 PN CPU 1515T-2 PN CPU 1516T-3 PN/DP CPU 1517T-3 PN/DP CPU 1511TF-1 PN CPU 1515TF-2 PN CPU 1516TF-3 PN/DP CPU 1517TF-3 PN/DP	Built-in port on CPU	Ethernet (TCP)	Setting Example 1 (page 7)

NOTE

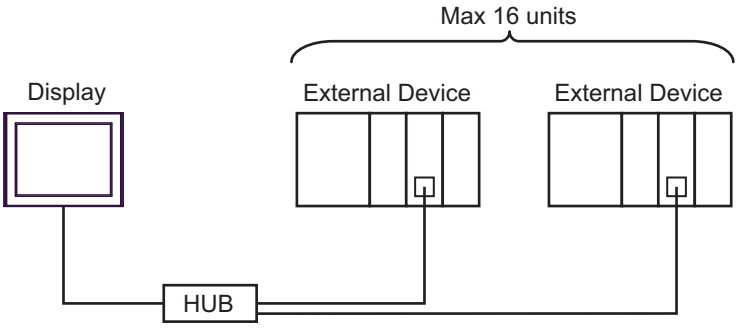
- GP-Pro EX versions that can use this driver differ depending on the display.
  - IPC, PC/AT compatible machines, or SP5000 Series Open Box
    Ver.4.05.100 or later
  - Other models
    Ver.4.06.300 or later
- This driver does not support GP3000 Series, LT3000 Series, GP-4100 Series (Monochrome Model), GP-4*01TM, GP-Rear Module, LT-4*01TM, and LT-Rear Module.
- When using this driver on models other than IPC, PCAT compatible machines, or SP5000 Series Open Box, the startup time on the display is slower by about 7 seconds when compared to other drivers.

■ Connection Configuration

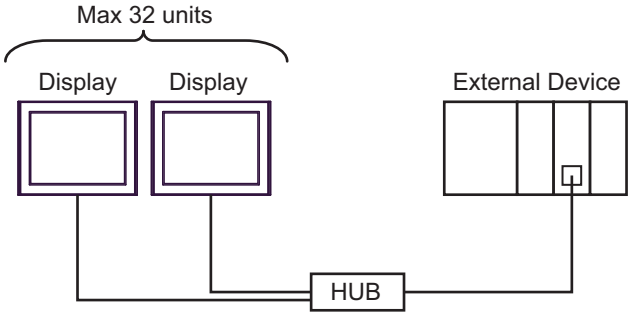
- 1:1 Connection



- 1:n Connection



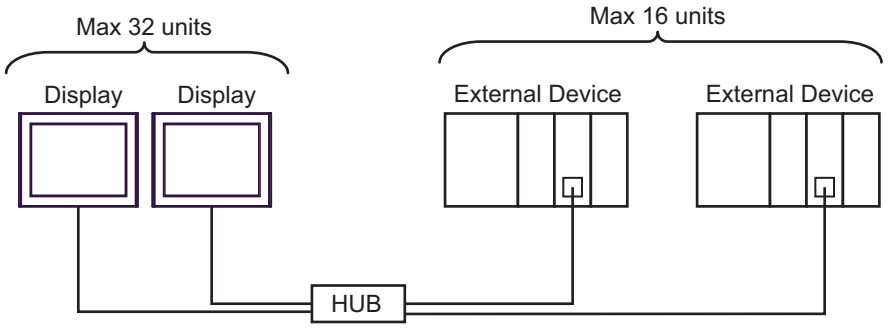
- n:1 Connection.



NOTE

- The number of connectable Display depends on the External Device. Please refer to the External Device manual for more details.

- m:n Connection.

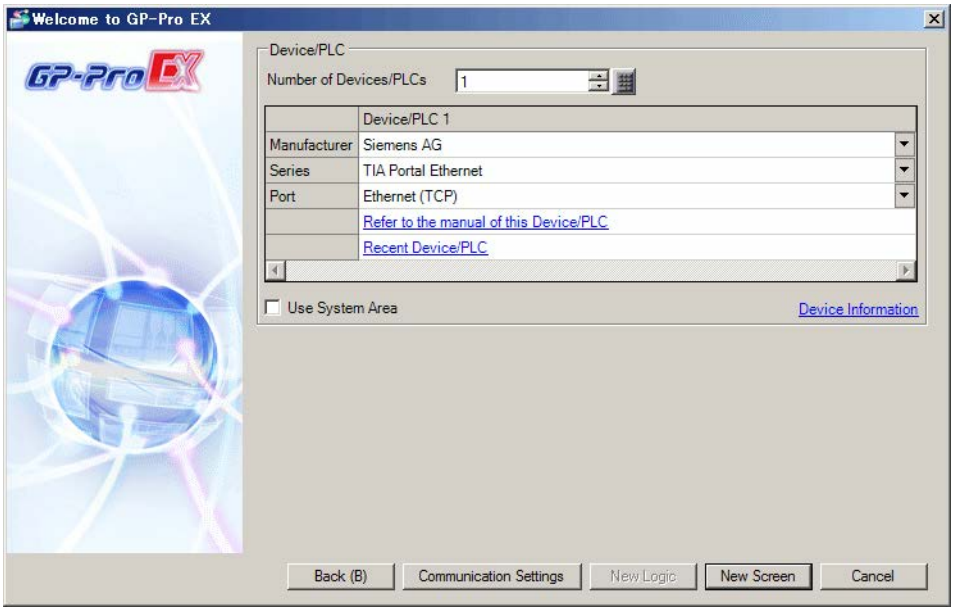


NOTE

- The number of connectable Display depends on the External Device.
  Please refer to the External Device manual for more details.

2 External Device Selection

Select the External Device to be connected to the Display.



Setup Items	Setup Description
Number of Devices/ PLCs	Enter an integer from 1 to 4 for the number of series to set.
Manufacturer	Select the manufacturer of the External Device to be connected. Select "Siemens AG".
Series	Select a model (series) of the External Device to be connected and connection method. Select "TIA Portal Ethernet". Check the External Device which can be connected in "TIA Portal Ethernet" in system configuration. ☞ "1 System Configuration" (page 3)
Port	Select the Display port to be connected to the External Device.
Use System Area	Check this option when you synchronize the system data area of Display and the device (memory) of External Device. When synchronized, you can use the ladder program of External Device to switch the display or display the window on the display. Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)" This can also be set in GP-Pro EX or in the Display's offline mode. Cf. GP-Pro EX Reference Manual "Display Unit (System Area) Settings Guide" Cf. Maintenance/Troubleshooting Manual "Main Unit - System Area Settings"

3 Communication Settings

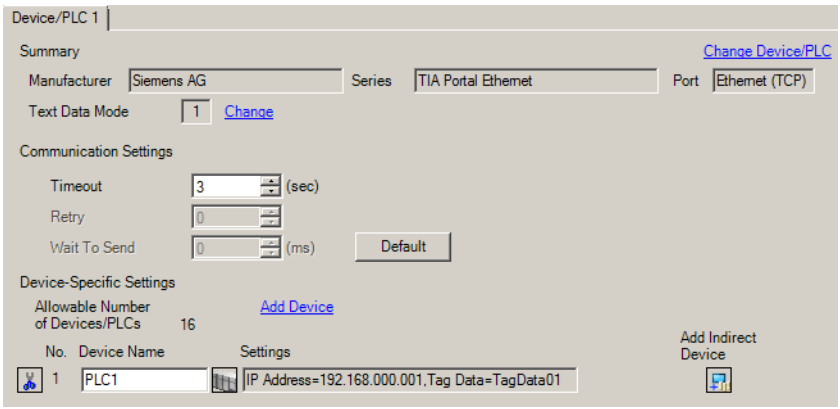
Examples of communication settings of the Display and the External Device, recommended by Pro-face, are shown.

3.1 Setting Example 1

■ GP-Pro EX Settings

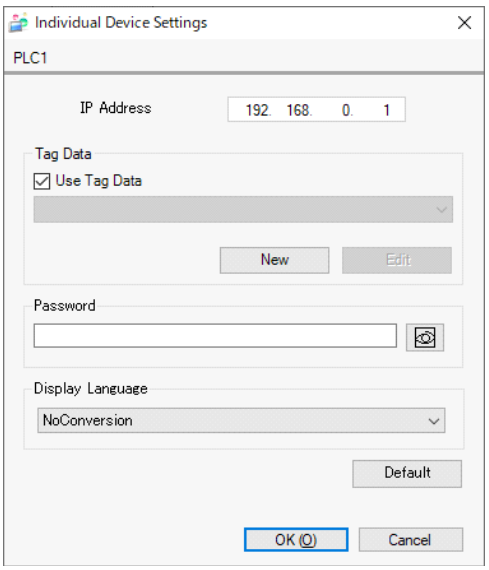
◆ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].



◆ Device Settings

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the external device and click [Settings] . To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.



◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.
- Set IP address on the External Device for IP address in Device-specific settings.
- You need to set IP address on the Display in the offline mode of the Display.

■ External Device Settings

Use the ladder software (TIA Portal [STEP7 V11-V20]) to configure the External Device communication settings. Please refer to the External Device manual for details.

(1) Start up the ladder software.

(2) From the [Start] menu, select [Create new project] to create the project.

(3) From [Devices & networks], select [Add new device].

(4) Select the External Device, and enter the correct version of the firmware. Click [OK]. You can check for the firmware version of the External Device in online mode.

NOTE

- You can check the External Device firmware version in online mode.
- Check that the External Device firmware version is supported by TIA Portal (STEP7 V11-V20). If you connect an External Device with a firmware version that is not supported by TIA Portal (STEP7 V11-V20), communication may not be possible.
  If that happens, change the firmware to a version supported by TIA Portal (STEP7 V11-V20).
- If the firmware of the External Device is a certain version or later, the [Only allow secure PG/PC and HMI communication] setting becomes enabled and communication with the Display is disabled.
  To resolve, go to [General]-> [Protection & Security]->[Connection mechanisms] and clear the [Only allow secure PG/PC and HMI communication] check box.

(5) In the [Project tree], from the External Device select [Device configuration].

(6) Click [Device view] tab, and from the External Device select [PROFINET interface_1].

(7) Click [Add new subnet] and enter the following settings for the network.

Setup Items	Setting Value
IP address	192.168.0.1
Subnet mask	255.255.255.0

(8) Add data block.

(9) Select the appropriate device and click the [Compile] icon.

(10) Save the project and then download to the External Device.

◆ Notes

- Check with a network administrator about IP address. Do not set the duplicate IP address.

4 Setup Items

Set communication settings of the Display with GP-Pro EX or in offline mode of the Display.

The setting of each parameter must be identical to that of External Device.

☞"3 Communication Settings" (page 7)

NOTE

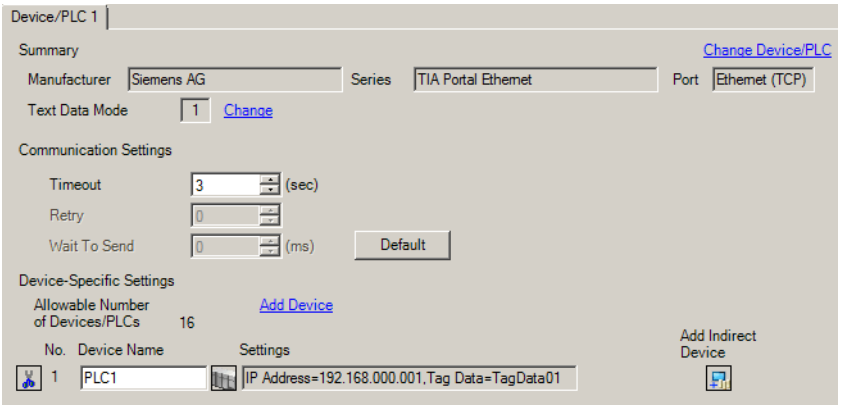
- Set the Display's IP address in offline mode.

  Cf. Maintenance/Troubleshooting Guide "Ethernet Settings"

4.1 Setup Items in GP-Pro EX

■ Communication Settings

To display the setup screen, from the [Project] menu, point to [System Settings] and select [Device/PLC].



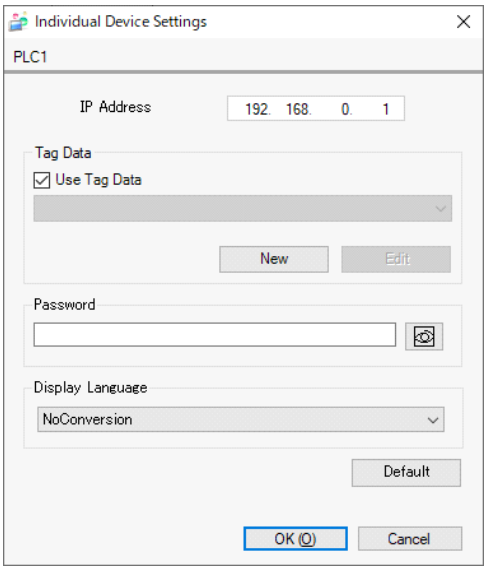
Setup Items	Setup Description
Timeout	Use an integer from 1 to 127 to enter the time (s) for which the Display waits for the response from the External Device.
Retry	In case of no response from the External Device, use an integer from 0 to 255 to display how many times the Display retransmits the command.
Wait To Send	Use an integer from 0 to 255 to display standby time (ms) for the Display from receiving packets to transmitting next commands.

NOTE

- Refer to the GP-Pro EX Reference Manual for Indirect Device.

■ Device Setting

To display the [Individual Device Settings] dialog box, from [Device-Specific Settings] in the [Device/PLC] window, select the external device and click [Settings] . To connect multiple External Devices, from [Device-Specific Settings] in the [Device/PLC] window, click [Add Device] to add another External Device.



Setup Items	Setup Description
IP Address	Set IP address of the External Device. **NOTE** • Check with a network administrator about IP address. Do not set the duplicate IP address.
Use Tag Data	Select the check box when using tag data (symbol addresses). This will enable you to select the tags you want to use. Select [New] when you want to create new tag data, or update existing tag data. [Edit] only allows you to delete tags or reimport. If tags are deleted from the project file (.ap**) that is reimported, then those same tags are also deleted from the existing tag data. ☞"■ Tag File Importing" (page 17)
Password	Enter Optional password for the Access level.
Display Language	Convert a string of WSTRING data type to the specified character code. When displaying on a data display unit, etc., set the display language of the part as well.

4.2 Setup Items in Offline Mode

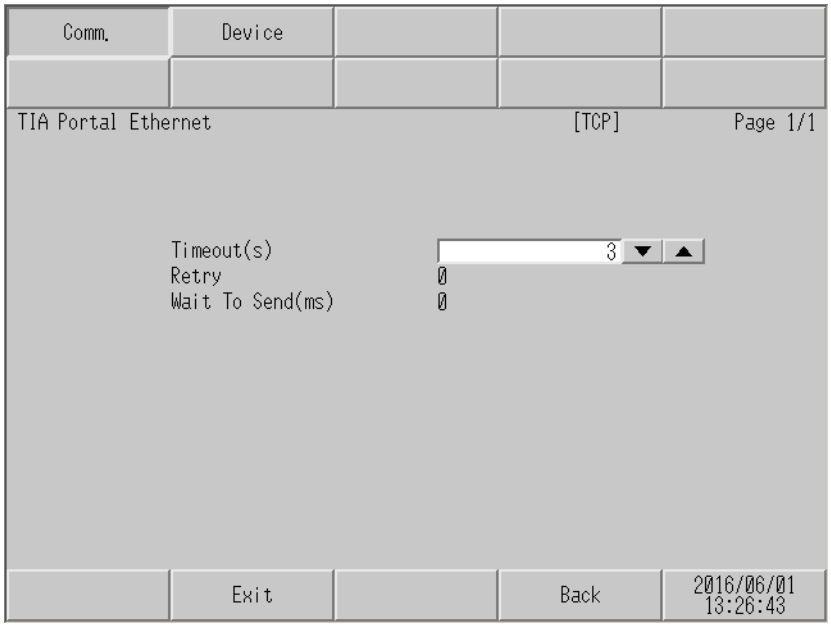
NOTE

- Refer to the Maintenance/Troubleshooting guide for information on how to enter offline mode or about the operation.

  Cf. Maintenance/Troubleshooting Guide "Offline Mode"

■ Communication Settings

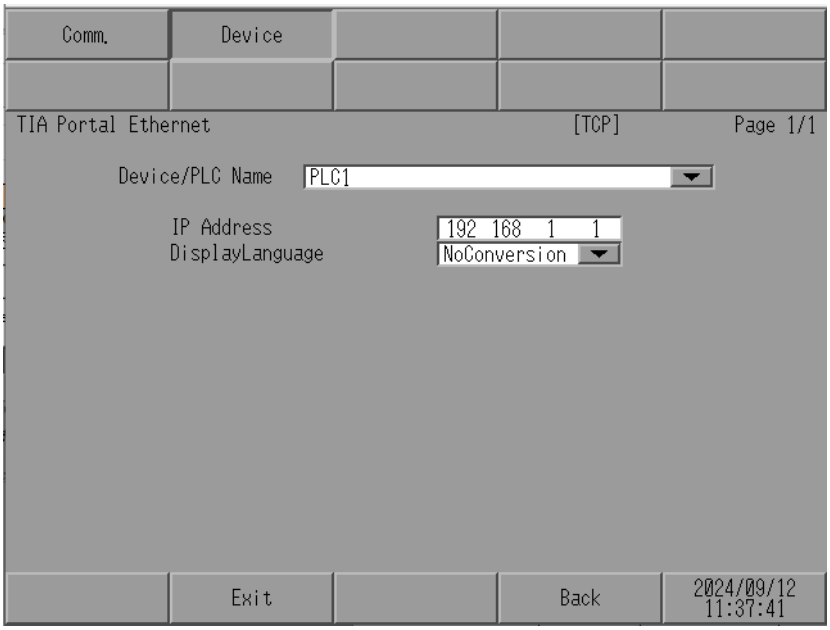
To display the setting screen, touch [Device/PLC Settings] from [Peripheral Settings] in offline mode. Touch the External Device you want to set from the displayed list.



Setup Items	Setup Description
Timeout	Use an integer from 1 to 127 to enter the time (s) for which the Display waits for the response from the External Device.
Retry	In case of no response from the External Device, use an integer from 0 to 255 to display how many times the Display retransmits the command.
Wait To Send	Use an integer from 0 to 255 to display standby time (ms) for the Display from receiving packets to transmitting next commands.

■ Device Setting

To display the setting screen, touch [Device/PLC Settings] from [Peripheral Settings]. Touch the External Device you want to set from the displayed list, and touch [Device].



Setup Items	Setup Description
Device/PLC Name	Select the External Device for device setting. Device name is a title of External Device set with GP-Pro EX.(Initial value [PLC1])
IP Address	Set IP address of the External Device. **NOTE** • Check with a network administrator about IP address. Do not set the duplicate IP address.
DisplayLanguage	Convert a string of WSTRING data type to the specified character code. When displaying on a data display unit, etc., set the display language of the part as well.

5 Supported Device Addresses

Range of supported device address is shown in the table below. Please note that the actually supported range of the devices varies depending on the External Device to be used. Please check the actual range in the manual of your External Device.

5.1 S7-1200/1500 Series

This address can be specified as system data area.

Device		Bit Address	Word Address	32bits	Remarks
BOOL	Single Tag	<TAGNAME>	-	-	*1 *2
	1D Array	<TAGNAME>[xl]- <TAGNAME>[xh]			
	2D Array	<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]			
	3D Array	<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]			
	4D Array	<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]			
	5D Array	<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]			
	6D Array	<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]			
BYTE SINT USINT	Single Tag	<TAGNAME>.00 - <TAGNAME>.07	<TAGNAME>	H / L	*1 *2
	1D Array	<TAGNAME>[xl].00- <TAGNAME>[xh].07	<TAGNAME>[xl]- <TAGNAME>[xh]		
	2D Array	<TAGNAME>[xl,yl].00- <TAGNAME>[xh,yh].07	<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]		
	3D Array	<TAGNAME>[xl,yl,zl].00- <TAGNAME>[xh,yh,zh].07	<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]		
	4D Array	<TAGNAME>[xl,yl,zl,wl].00- <TAGNAME>[xh,yh,zh,wh].07	<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]		
	5D Array	<TAGNAME>[xl,yl,zl,vl,wl].00- <TAGNAME>[xh,yh,zh,vh,wh].07	<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]		
	6D Array	<TAGNAME>[xl,yl,zl,ul,vl,wl].00- <TAGNAME>[xh,yh,zh,uh,vh,wh].07	<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]		

Device		Bit Address	Word Address	32bits	Remarks
WORD INT UINT	Single Tag	<TAGNAME>.00 - <TAGNAME>.15	<TAGNAME>	H / L	*1 *2 *3
	1D Array	<TAGNAME>[xl].00- <TAGNAME>[xh].15	<TAGNAME>[xl]- <TAGNAME>[xh]		
	2D Array	<TAGNAME>[xl,yl].00- <TAGNAME>[xh,yh].15	<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]		
	3D Array	<TAGNAME>[xl,yl,zl].00- <TAGNAME>[xh,yh,zh].15	<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]		
	4D Array	<TAGNAME>[xl,yl,zl,wl].00- <TAGNAME>[xh,yh,zh,wh].15	<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]		
	5D Array	<TAGNAME>[xl,yl,zl,vl,wl].00- <TAGNAME>[xh,yh,zh,vh,wh].15	<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]		
	6D Array	<TAGNAME>[xl,yl,zl,ul,vl,wl].00- <TAGNAME>[xh,yh,zh,uh,vh,wh].15	<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]		
DWORD DINT UDINT	Single Tag	<TAGNAME>.00 - <TAGNAME>.31	<TAGNAME>	H / L	*1 *2
	1D Array	<TAGNAME>[xl].00- <TAGNAME>[xh].31	<TAGNAME>[xl]- <TAGNAME>[xh]		
	2D Array	<TAGNAME>[xl,yl].00- <TAGNAME>[xh,yh].31	<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]		
	3D Array	<TAGNAME>[xl,yl,zl].00- <TAGNAME>[xh,yh,zh].31	<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]		
	4D Array	<TAGNAME>[xl,yl,zl,wl].00- <TAGNAME>[xh,yh,zh,wh].31	<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]		
	5D Array	<TAGNAME>[xl,yl,zl,vl,wl].00- <TAGNAME>[xh,yh,zh,vh,wh].31	<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]		
	6D Array	<TAGNAME>[xl,yl,zl,ul,vl,wl].00- <TAGNAME>[xh,yh,zh,uh,vh,wh].31	<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]		
LWORD LINT ULINT	Single Tag	<TAGNAME>.00 - <TAGNAME>.63	<TAGNAME>	H / L	*1 *2 *4
	1D Array	<TAGNAME>[xl].00- <TAGNAME>[xh].63	<TAGNAME>[xl]- <TAGNAME>[xh]		
	2D Array	<TAGNAME>[xl,yl].00- <TAGNAME>[xh,yh].63	<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]		
	3D Array	<TAGNAME>[xl,yl,zl].00- <TAGNAME>[xh,yh,zh].63	<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]		
	4D Array	<TAGNAME>[xl,yl,zl,wl].00- <TAGNAME>[xh,yh,zh,wh].63	<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]		
	5D Array	<TAGNAME>[xl,yl,zl,vl,wl].00- <TAGNAME>[xh,yh,zh,vh,wh].63	<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]		
	6D Array	<TAGNAME>[xl,yl,zl,ul,vl,wl].00- <TAGNAME>[xh,yh,zh,uh,vh,wh].63	<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]		

Device		Bit Address	Word Address	32bits	Remarks
REAL TIME DATE*5 TIME_ OF_DAY DT STRING*6 S7REAL*7 WSTRING*8	Single Tag	-	<TAGNAME>	H / L	*1 *2
	1D Array		<TAGNAME>[xl]- <TAGNAME>[xh]		
	2D Array		<TAGNAME>[xl,yl]- <TAGNAME>[xh,yh]		
	3D Array		<TAGNAME>[xl,yl,zl]- <TAGNAME>[xh,yh,zh]		
	4D Array		<TAGNAME>[xl,yl,zl,wl]- <TAGNAME>[xh,yh,zh,wh]		
	5D Array		<TAGNAME>[xl,yl,zl,vl,wl]- <TAGNAME>[xh,yh,zh,vh,wh]		
	6D Array		<TAGNAME>[xl,yl,zl,ul,vl,wl]- <TAGNAME>[xh,yh,zh,uh,vh,wh]		

*1 <TAGNAME>: For structures, the Tag Name includes the structure name. The maximum length of the Tag Name is 255 characters, including delimiters and the element number.
If using UNICODE text, the maximum number for each element is 80 characters.

Example
BOOL type single tag: "BOOLSYMBOL"
BOOL type 1D array: "BOOL1D[10]"
WORD type 2D array: "WORD2D[10,10]"
UDINT type 3D array: "UDINT[0,1,2]"
User-defined structure: "STRUCT001.STRINGSYM"

For tag names and element names, you can use alphanumeric characters (upper and lower case), underscore, space, and multi-byte characters (such as Japanese). Note the following input limitations.
• The last character in the name cannot be the underscore symbol.
• The pound symbol (#) can be used as the first character only.
• Names cannot include any of the following symbols:
. , ! " $ % ^ & * ( ) - + = { } [ ] / \ ? # @ ~ : ; < > ' ' |
• You cannot start names with any of the following text:
LS, USR, SCR, PRT

*2 The number of elements for each dimension is from "l" (minimum number of elements) to "h" (maximum number of elements).

*3 By default, the system data area is set up with 16 words. Even if you want to use less than 16 words for the system data area, you have to map a 16 word (or larger) array tag, and then select the items to include in the system data area.

*4 64-bit device. Because GP-Pro EX does not support the LONG data type, the top 4 bytes are invalid.

*5 Handled as 16-bit devices in the External Device, but as 32-bit devices on the display unit.

*6 The maximum number of characters for the STRING device is 254 characters.

*7 This driver can import LREAL data type (64bit floating-point type in SIEMENS controller) as S7LREAL. "S7LREAL" type works as 32bit floating-point type in the Display.

*8 The UNICODE character string is used for External Device, but is converted to the character code selected on the individual device setting screen for Display.
WSTRING data type tags can be imported, but cannot be added manually.
The data size of the WSTRING data type operator is one word larger than the specified maximum length.

IMPORTANT

- To use tags, you need to import Tag Data (symbol addresses).
  For information about how to import and the limits for tag data capacity, please refer to the GP-Pro EX Reference Manual.
- GP-Pro EX Reference Manual, "Using Device/PLC Tags"
- To import a TIA Portal project file, use one of the following versions of the driver.

TIA Portal Version		TIA Portal Ethernet Driver Version
V11 - V13		V1.10.00 or later
V14		V1.12.02 or later
V15	V15	V1.13.02 or later
	V15.1	V1.14.05 or later
V16		V1.15.09 or later
V17		V1.16.11 or later
V18		V1.17.18 or later
V19		V1.17.21 or later
V20		V1.17.23 or later

- When tags for the following data types are imported, the data type is converted as shown.

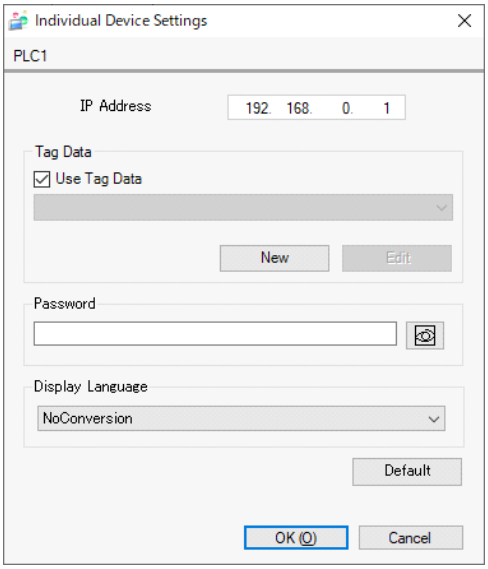
TIA Portal data type	Converted data type
S5_TIME	WORD
CHAR	BYTE
WCHAR	WORD
TIMER	WORD
COUNTER	WORD
IEC_TIMER	STRUCT
IEC_SCOUNTER	STRUCT
IEC_USCOUNTER	STRUCT
IEC_COUNTER	STRUCT
IEC_UCOUNTER	STRUCT
IEC_DCOUNTER	STRUCT
ERROR_STRUCT	STRUCT
NREF	STRUCT
CREF	STRUCT

NOTE

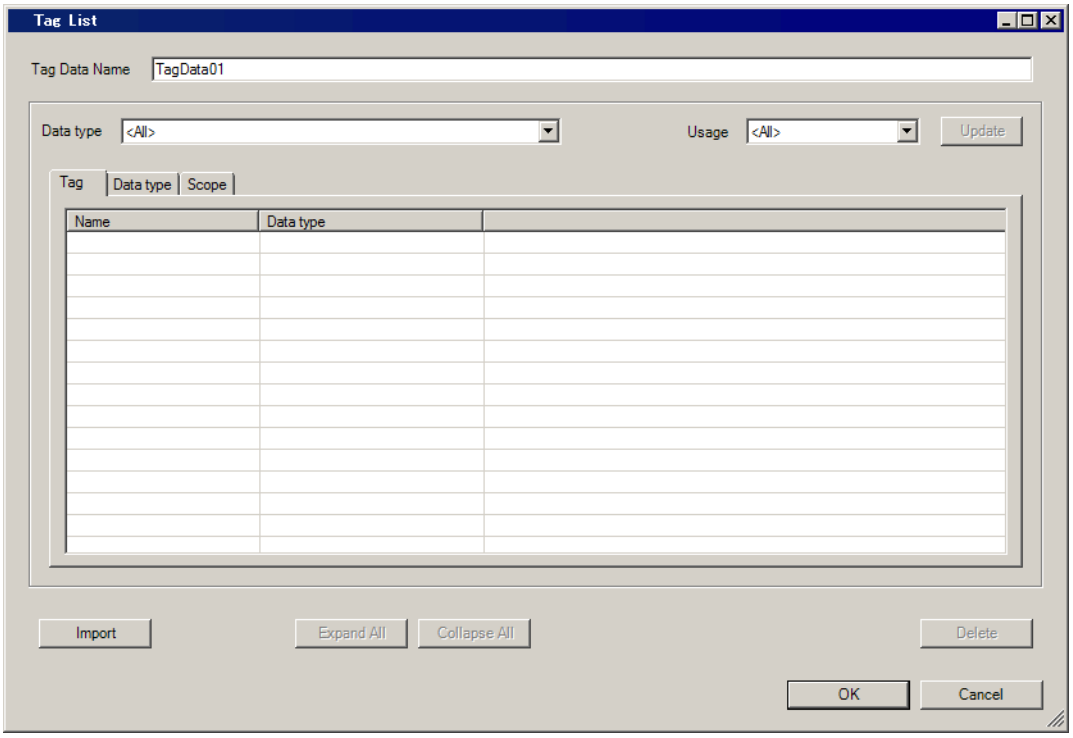
- To use a different TIA Portal project file, first rename the folder where the current project file resides. Next, in the [Individual Device Settings] dialog box click [New], and select the new project file.
- Please refer to the GP-Pro EX Reference Manual for system data area.
  Cf. GP-Pro EX Reference Manual "LS Area (Direct Access Method Area)"
- Please refer to the precautions on manual notation for icons in the table.
  ☞"Manual Symbols and Terminology"

■ Tag File Importing

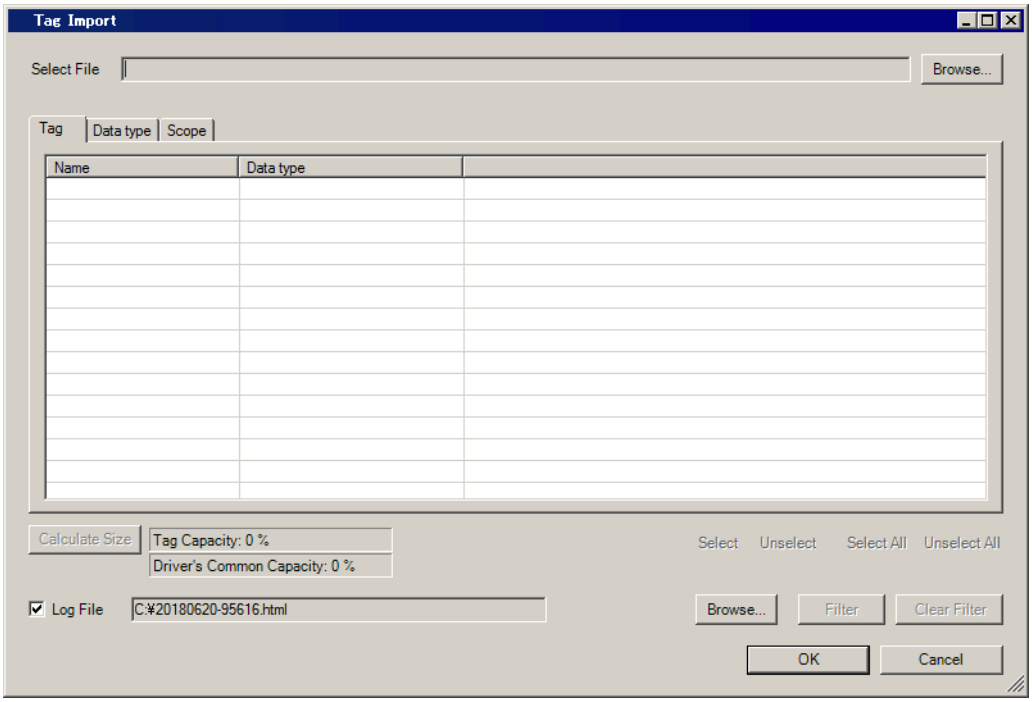
1 In GP-Pro EX, open the [Individual Device Setting] dialog box, and check [Use Tag Data]



2 Click [New].



3 Click [Import].

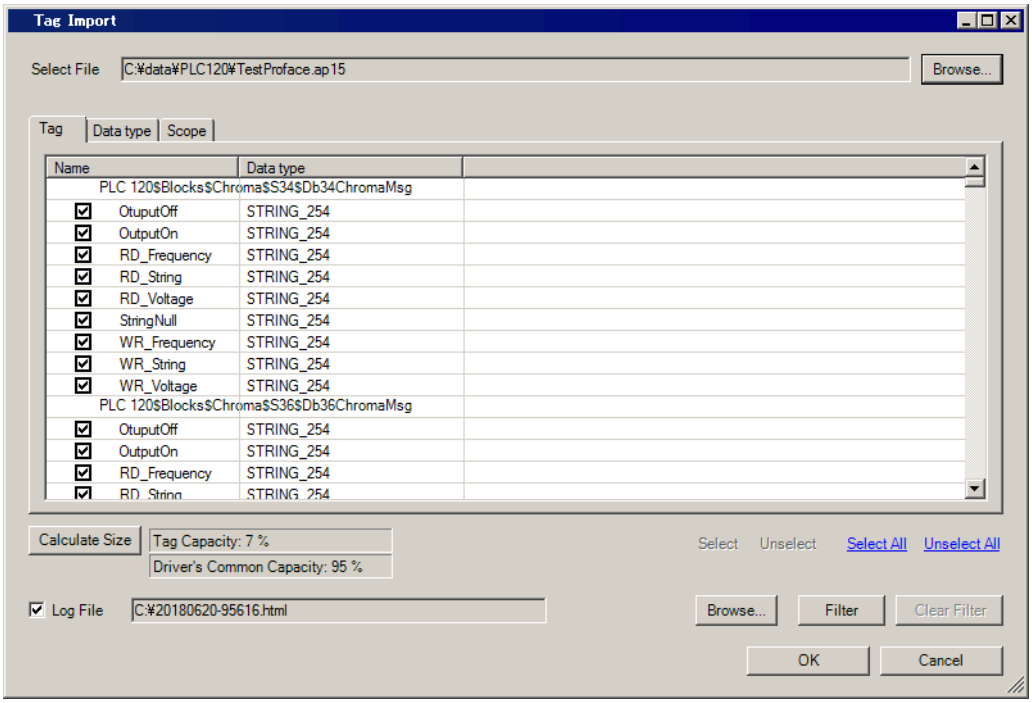


4 Click [Browse...] of [Select File], and select the project file of the TIA Portal

NOTE

- When two or more programs are included in a project file, the selection dialog box of a program is displayed.
  The program to import is select and click [OK].
- You can import only one project file (.ap**) to GP-Pro EX. When importing tags into multiple External Devices, select the same project file for all the External Devices.

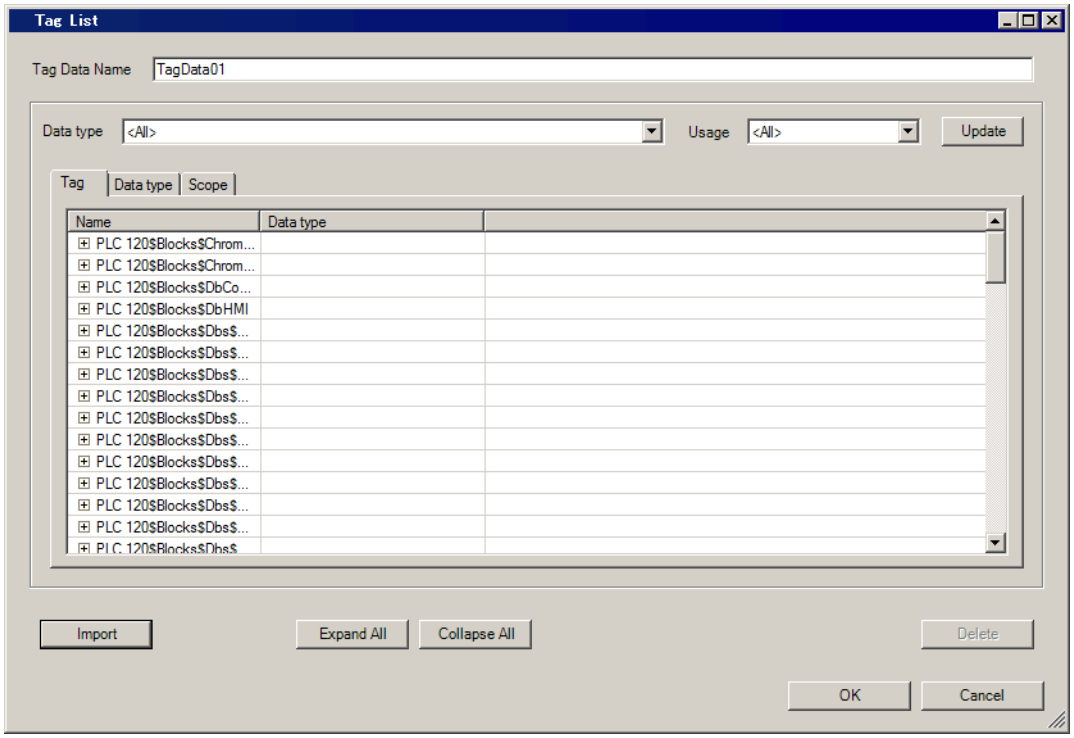
5 Check the tags to import, and click [OK].



NOTE

- When tag names include symbols that are not allowed in GP-Pro EX, the tag is not imported. Before importing, please change the tag name.
- When using a unit other than an IPC, PC/AT compatible machine, or SP5000 Series Open Box, and the [Driver's Common Capacity] exceeds 100%, the RHxx130 error will occur. To reduce the [Driver's Common Capacity] below 100%, adjust the number of tags and PLC devices (PLC nodes) used in TIA Portal.

6 Check the imported tags, and click [OK]



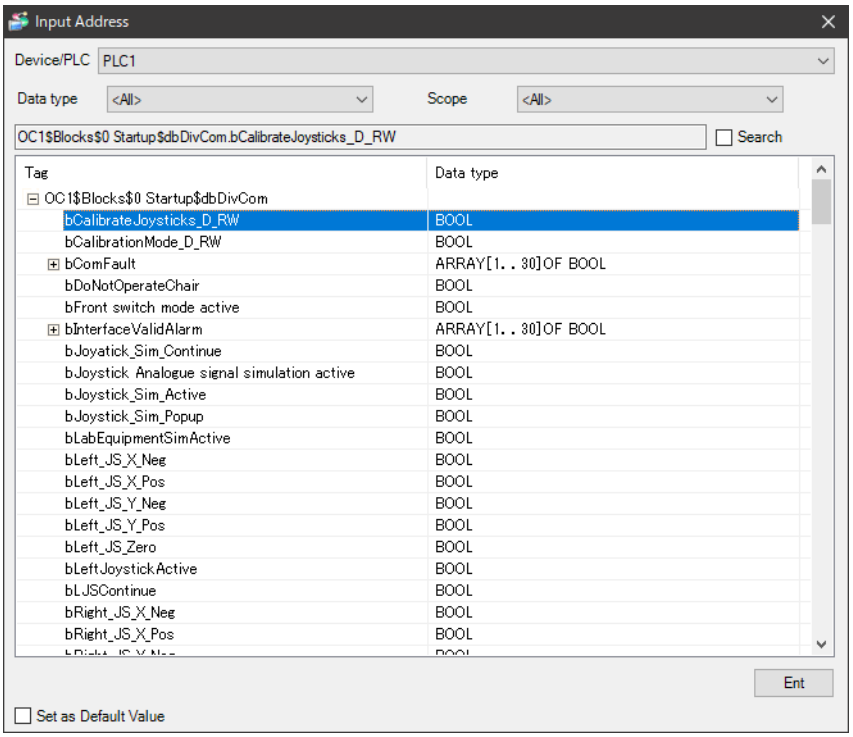
NOTE

- For details on importing tags, refer to the GP-Pro EX Reference Manual, "Using Device/PLC Tags".
- You cannot edit imported tag data. Please import again if you change the tag data.
- This driver uses the tag data included in a TIA Portal project.
- For error messages in the import log, refer to the following.

☞ "7 Error Messages" (page 23)

■ Address Inputting

Click the calculator icon on the right side of the address field to display the following input address dialog box.



Setup Items	Setup Description
Device/PLC	Select the External Device.
Data type	As the data type used by the tag is registered and displayed, select the data type. Tags with the selected data type are displayed in tree list view.
Scope	Select the scope of the tag.
Tag name text box	Display the address of the tag selected in the tree list view.
Search	If you select the [Search] check box, the search function becomes enabled and only tags that contain the string entered in the text box are sorted and displayed. **NOTE** • If there are too many tags registered, it may not be possible to search for strings that exceed the upper limit.
Tree list view Tag, Data type	Click the title to sort in ascending or descending order. Click the plus [+] on a structure tag to display members in the structure and so you can select a member. Click the plus [+] on an array tag to display array element numbers, and so you can select an element. For bit addresses, click the plus [+] of data types that support bit tags to display bit numbers. **NOTE** • In word address mode, the bit type (BOOL) is grayed out and cannot be selected. • In bit address mode, data types where bits cannot be selected are grayed out and cannot be selected. However, struct tags and array tags are not greyed out.
Set as Default Value	Sets the address of the selected tag as the default value.
Ent	Click to enter the address of the selected tag.

6 Device Code and Address Code

Device code and address code can not be used.

7 Error Messages

Error messages are displayed on the Display screen as follows: "No.: Device Name: Error Message (Error Occurrence Area)". Each description is shown below.

Item	Description
No.	Error No.
Device Name	Name of the External Device where error occurs. Device name is a title of the External Device set with GP-Pro EX. (Initial value [PLC1])
Error Message	Displays messages related to the error which occurs.
Error Occurrence Area	Displays IP address or device address of the External Device where error occurs, or error codes received from the External Device. NOTE • IP address is displayed such as "IP address (Decimal): MAC address (Hex)". • Device address is displayed such as "Address: Device address". • Received error codes are displayed such as "Decimal [Hex]".

Display Examples of Error Messages

"RHAA035: PLC1: Error has been responded for device write command (Error Code: 2 [02H])"

NOTE
- Refer to your External Device manual for details on received error codes.
- Refer to "Display-related errors" in "Maintenance/Troubleshooting Guide" for details on the error messages common to the driver.

■ Error Code Peculiar to External Device

Error Code	Description	Comment
0xFFA00016	SYMBOLIC PARTIAL ERROR	There may be a difference between the project imported into GP-Pro EX and the project in the connected device. Please check if the projects match.
0xFFF0000C	No free connections available	The defined External Device has already reached its maximum number of node connections. Please reduce the number of nodes connected on the External Device to open a connection.
0xFFF0000D	Device not configured or not supported	The defined External Device may not support TIA Portal. Check the External Device.
0xFFF50001	Invalid packet	Packet received by AGLink library may be corrupted or may contain invalid data. Check the External Device connection status and the communication settings.
0xFFF50002	No connection to External Device	Check the External Device connection.
0xFFF50003	Connection closed	The connection was closed during communication with the External Device. Check if communication is still active with other nodes.
0xFFF50004	Timeout	Check the External Device connection.

Error Code	Description	Comment
0xFFF5000A	No data available e.g. DB is missing	Some symbols imported from the TIA project are missing from the defined External Device. Please import again.
0xFFF900000	TIA read error	Error occurred during read process. Tag data between the External Device and display may not match. Check the tag data.
0xFFF900001	TIA write error	Error occurred during write process. Tag data between the External Device and display may not match. Check the tag data.
0xFFF900016	TIA portal error	Error occurred during TIA Portal processing. There may have been an attempt to access an invalid array element. Check the addresses.

■ Error Messages Peculiar to External Device

Message ID	Error Message	Description
RHxx128	(Node Name): %s:Out of range value in write request. (Tag name:%s)	Displays when the write value is out of range. Please write a value that is within the defined range.
RHxx129	The version of this system is unsupported.	The run time you are using does not support this driver. Please transfer the project file again.
RHxx130	No TIA Portal project data is available.	The TIA Portal project data has not been imported into the GP-Pro EX project. Please import again.

■ Import Log Error Messages

- Analysis Log

Error Message	Description	Solution
Unsupported data type. (***)	GP-Pro EX cannot use the data type shown in the message.	Change to a supported data type.

- Import Log

Error Message	Description	Solution
***: The Structure has invalid name member.	The message identifies either the data type or tag that has a structure name with unsupported characters.	Check if the name of the structure conforms to the naming rules.
***: Unknown Scope Name is used for the Tag.	The message identifies either the data type or tag that has a scope name with unsupported characters.	Check if the name included in the scope conforms to the naming rules.
***: The name is invalid.	The message identifies the data type or tag name with unsupported characters.	Check if the data type or tag name conforms to the naming rules.
***: Unknown Data type is used for the Tag.	The message identifies either the data type or tag that has a data type name that is unsupported or invalid.	The error may be resolved by correcting other errors.

NOTE

- When importing a TIA Portal project, a project analysis log and import log are generated. As log messages are output in the order when errors occurred, correct issues in order, from the top.
- For information on supported data types and supported characters for names, refer to "Supported Device Addresses".

☞ "5 Supported Device Addresses" (page 13)