

Mitsubishi iQ-R Series (Ethernet)

Supported Series: Mitsubishi

R00/R01/R02/R04/R08/R16/R32/R120/R04EN/R08EN/R16EN/R32EN/R120EN/R08P/R16P/R32P/R120P/R08SF/R16SF/R32SF/R120SF/R08PSF/R16PSF/R32PSF/R120PSF

CPU Ethernet Module, M80 CNC Controller

Website: <http://www.mitsubishi-automation.com>

HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi iQ-R Series (Ethernet)		
PLC I/F	Ethernet		
Port no.	Set identically to the PLC setting		Advised to set port no. to 4999
PLC sta. no.	Set identically to the PLC setting		
Network number	0	0~999	
Communication data code	Binary	Binary / ASCII	
PLC Mode	IR-F	IQ-F / IQ-R	Refer to Mitsubishi manual

PLC Settings:

[Setting Method] Use IP Address

[Online Change] needs to be set to enable

[Communication Data Code] Binary

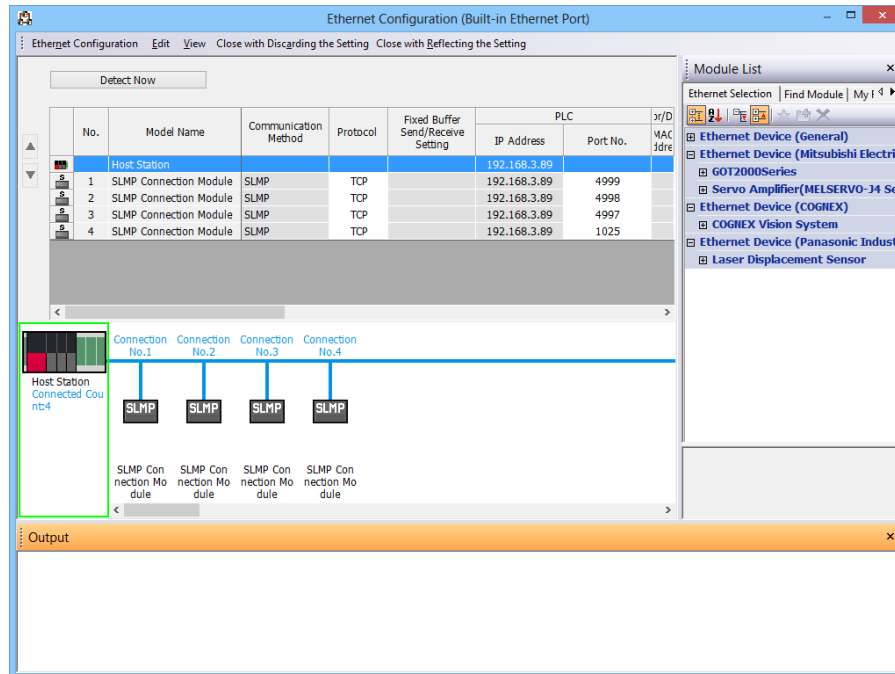
[Opening Method] do not open by program

Setting Item	
Item	Setting
Own Node Settings	
Parameter Setting Method	Parameter Editor
IP Address	
IP Address	192 . 168 . 3 . 89
Subnet Mask	255 . 255 . 252 . 0
Default Gateway	192 . 168 . 1 . 254
Communications by Network No./Station No.	Disable
Setting Method	Use IP Address
Network No.	----
Station No.	----
Enable/Disable Online Change	Enable All (SLMP)
Communication Data Code	Binary
Opening Method	Do Not Open by Program
CC-Link IEF Basic Settings	

[Ethernet Configuration]

To connect PLC with multiple HMIs, Port No. must be set.

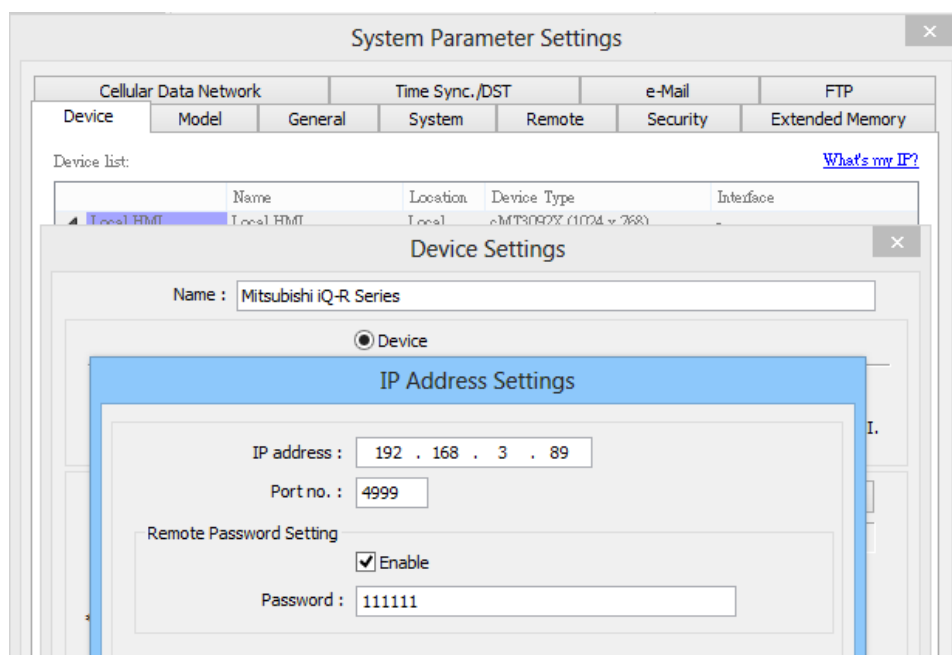
In GX WORK 3, the setting steps are: Project -> Parameter -> R04CPU -> Module Parameter -> Ethernet Port -> Setting Item -> External Device Configuration -> Detailed Setting



[Remote Password Setting]

Set a remote password and a target connection in the engineering tool, and write the data to the CPU module.

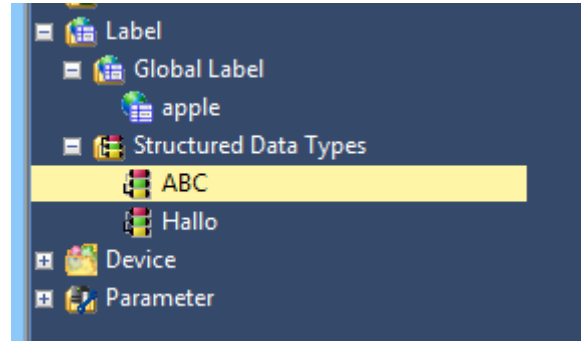
Navigation Window => [Parameter] => [Remote Password] => [Remote Password Setting] Screen



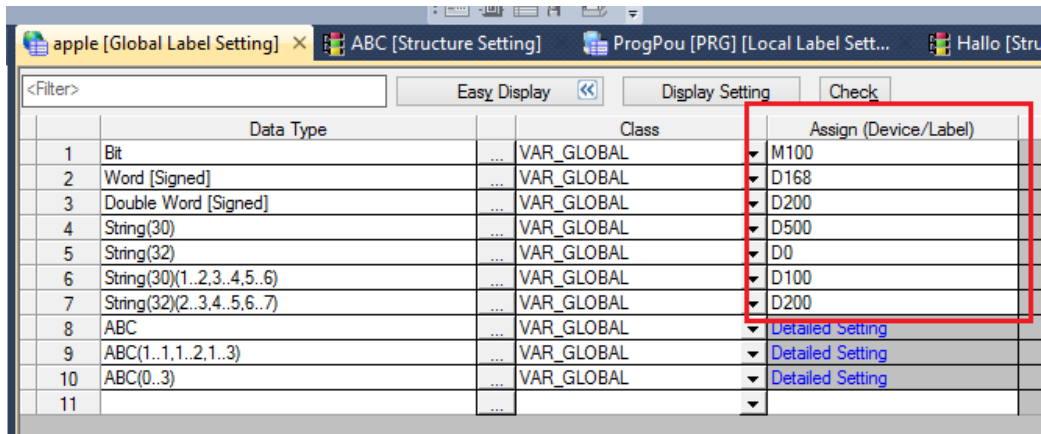
Import Tags:

GX Works3 Export Tags:

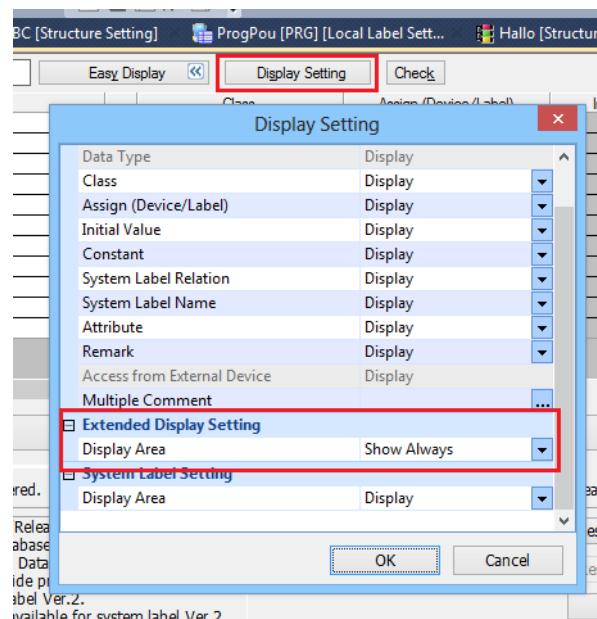
1. Add new data to **[Global Label]** and **[Structure Data Types]**.



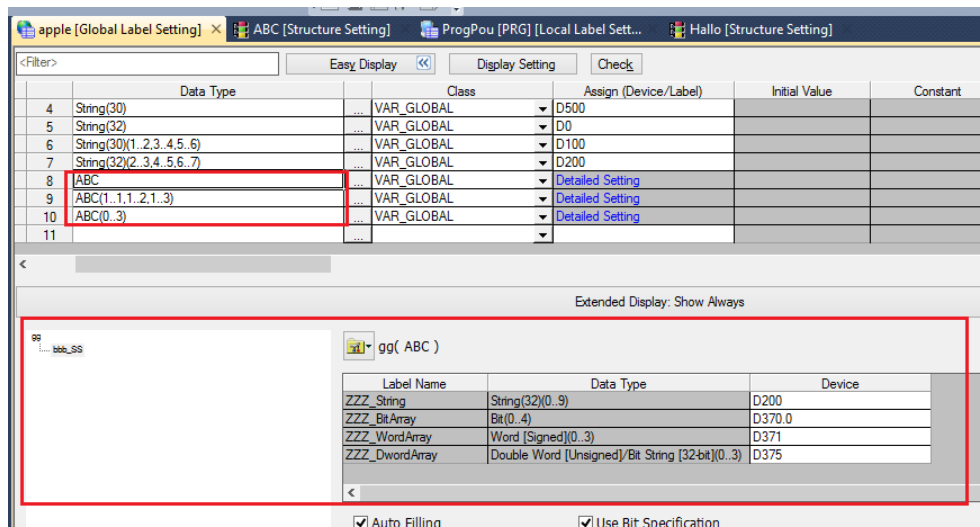
2. Assign Global label to device address.



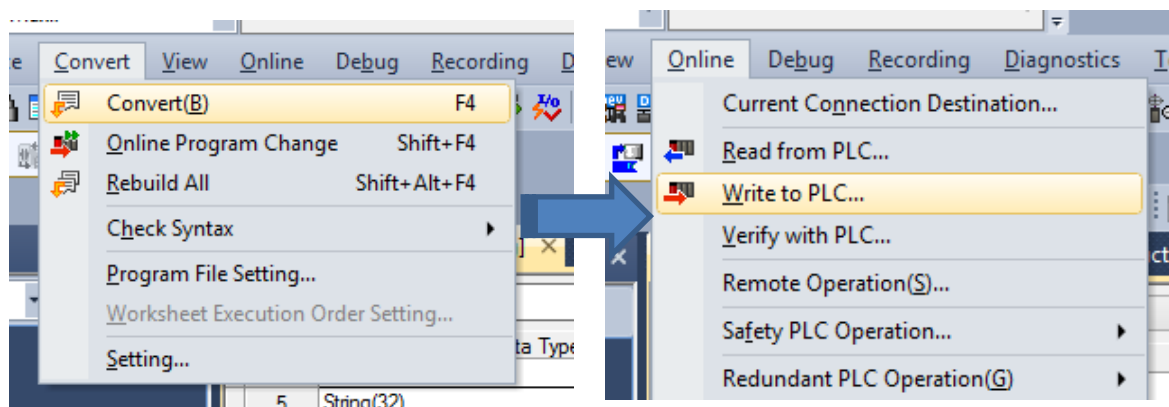
3. Display Setting -> Extended Display Setting -> Display Area -> Show Always



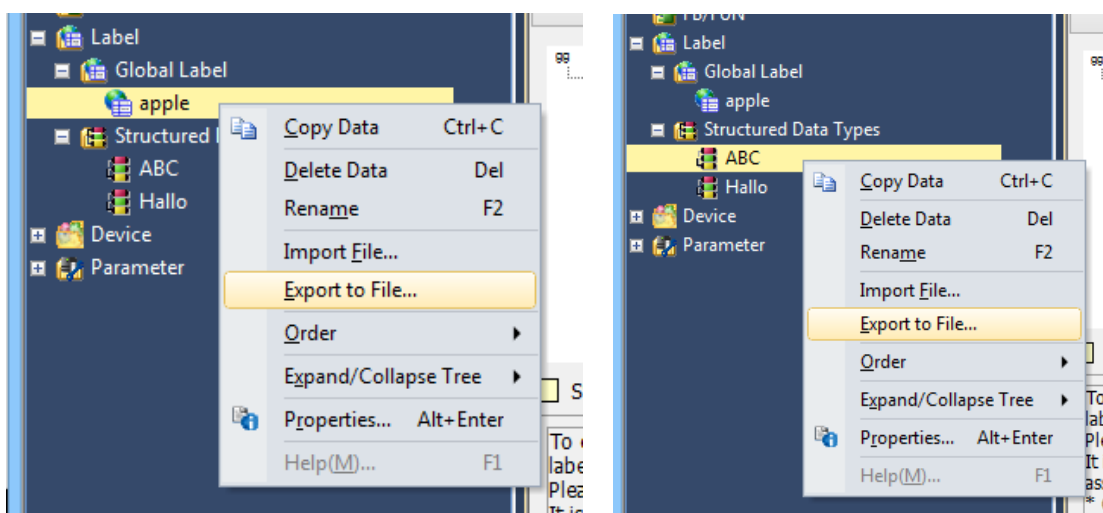
4. The structure data type can assign address after Extended display is set to show always.



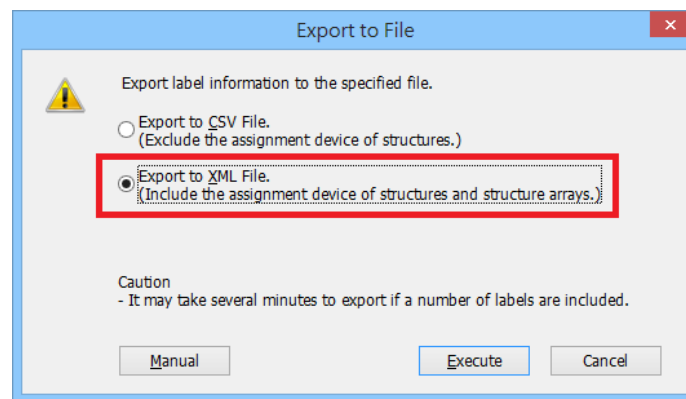
5. Covert -> Write to PLC



6. Right-click the data created by [Global Label] and [Structured Data Types], and then [Export to File].

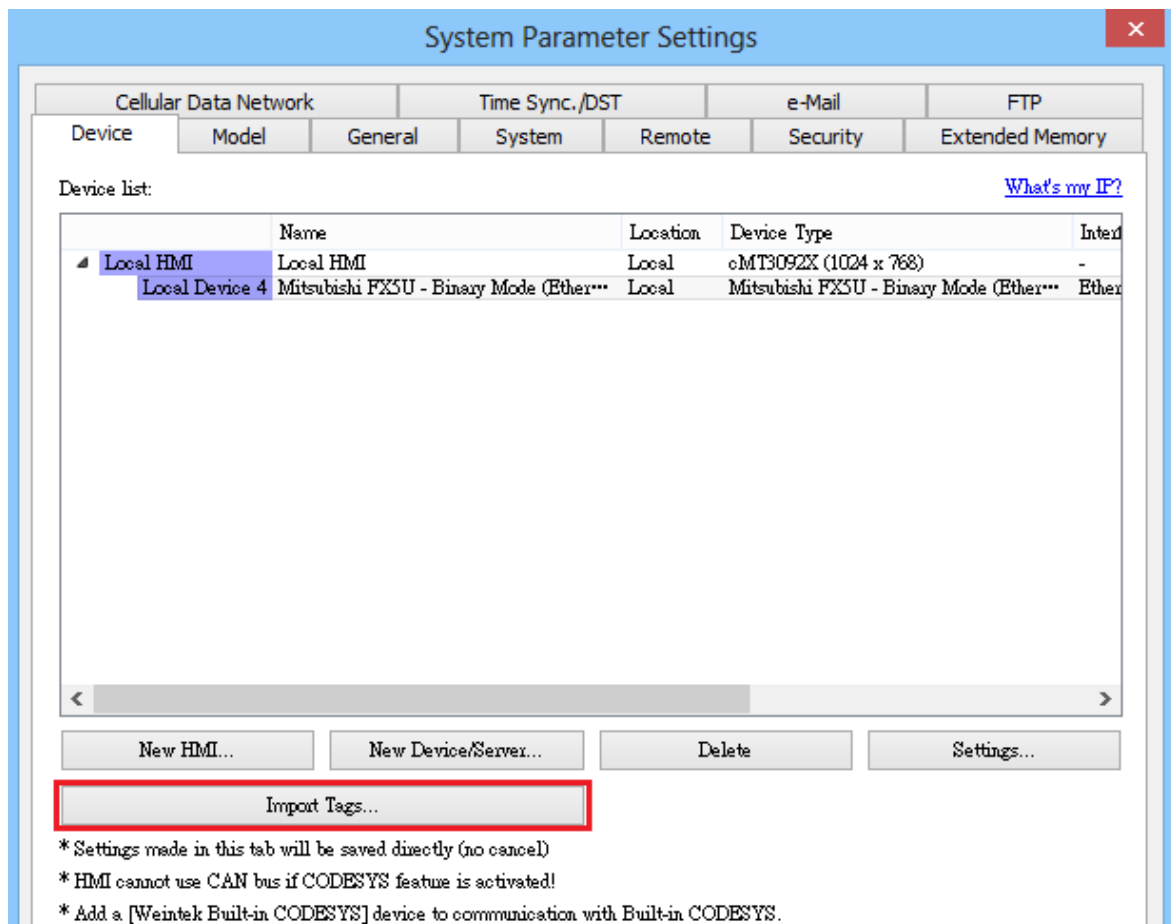


7. Export to XML File -> Execute.

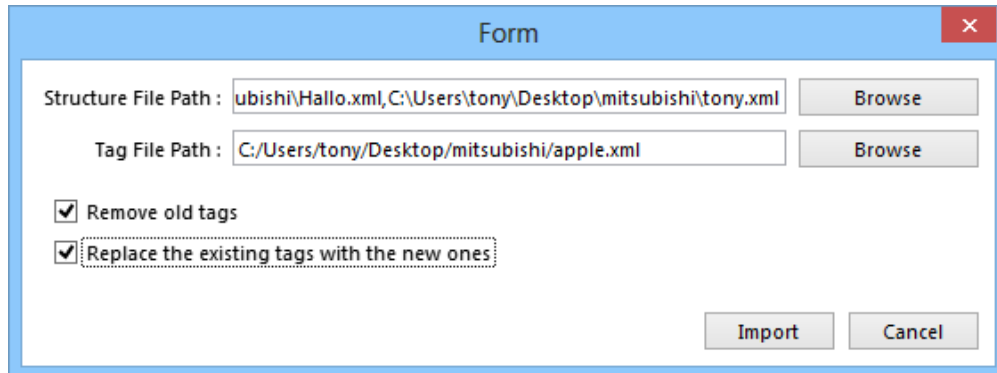


EasyBuilder Pro Import Tags:

1. After setting the **[System Parameters]** and creating the driver, click **[Import Tags]**.



2. Select the Global Label and Structure File to be imported (multiple selections possible), and then click Import



Form

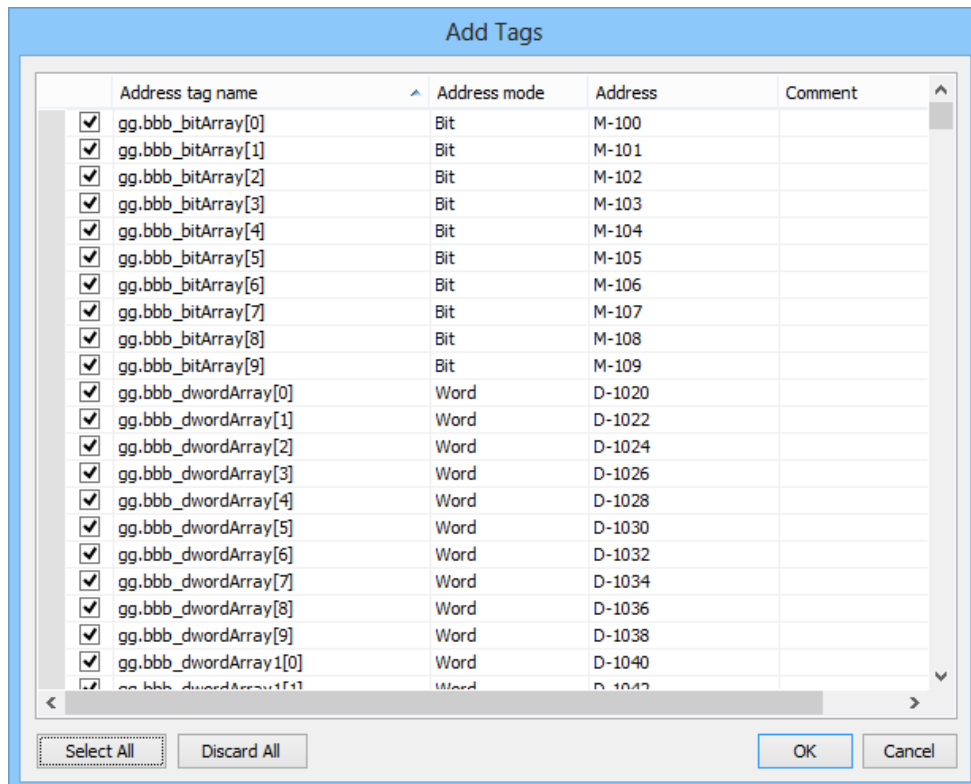
Structure File Path :

Tag File Path :

☒ Remove old tags

☒ Replace the existing tags with the new ones

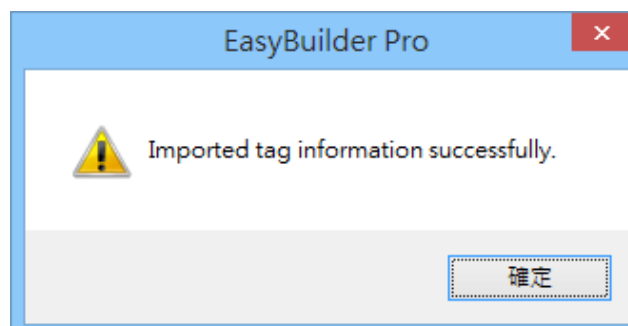
3. Select All or selectively import tags.




Add Tags

	Address tag name	Address mode	Address	Comment
<input checked="" type="checkbox"/>	gg.bbb_bitArray[0]	Bit	M-100	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[1]	Bit	M-101	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[2]	Bit	M-102	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[3]	Bit	M-103	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[4]	Bit	M-104	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[5]	Bit	M-105	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[6]	Bit	M-106	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[7]	Bit	M-107	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[8]	Bit	M-108	
<input checked="" type="checkbox"/>	gg.bbb_bitArray[9]	Bit	M-109	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[0]	Word	D-1020	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[1]	Word	D-1022	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[2]	Word	D-1024	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[3]	Word	D-1026	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[4]	Word	D-1028	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[5]	Word	D-1030	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[6]	Word	D-1032	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[7]	Word	D-1034	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[8]	Word	D-1036	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[9]	Word	D-1038	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[10]	Word	D-1040	
<input checked="" type="checkbox"/>	gg.bbb_dwordArray[11]	Word	D-1042	

4. Imported tag information successfully.



EasyBuilder Pro

 Imported tag information successfully.

Limitations:

1. Structure in structure and array in structure are not supported.
2. If TN, CN, LCN, SN and other addresses are used in the structure, three members of **Contact**, **Coil**, and **Current Value** will be automatically generated
3. The String type will end with 0x00. If the length is set to 16 words, then a complete string will be 17 words in length.
4. Support data type list:

Data Type	Support
Bit	✓
Word [Unsigned] / Bit String [16-bit]	✓
Double Word [Unsigned] / Bit String [32-bit]	✓
Word [Signed]	✓
Double Word [Signed]	✓
FLOAT [Single Precision]	✓
Time	✓
String(32)	✓
Pointer	✗
Timer	✓
Counter	✓
Long Counter	✓
Retentive Timer	✓

Device Address:

Bit/Word	Device type	Format	Range	Memo
B	X	HHHHh	0 ~ 2ffff	Input
B	Y	HHHHh	0 ~ 2ffff	Output
B	M	DDDDDDDDDD	0 ~ 153165823	Internal Relay
B	L	DDDDD	0 ~ 32767	Latch Relay
B	B	HHHHHHHHh	0 ~ 9211fff	Link Relay
B	F	DDDDD	0 ~ 32767	Annunciator
B	SB	HHHHHHHHh	0 ~ 9211fff	Link Special Relay
B	V	DDDDD	0 ~ 32767	Edge Relay
B	TS	DDDDDDDD	0 ~ 8993439	Timer Contact
B	TC	DDDDDDDD	0 ~ 8993439	Timer Coil

Bit/Word	Device type	Format	Range	Memo
B	SS	DDDDDDDD	0 ~ 8993439	Retentive Timer
B	SC	DDDDDDDD	0 ~ 8993439	Retentive Timer Coil
B	CS	DDDDDDDD	0 ~ 8993439	Counter Contact
B	CC	DDDDDDDD	0 ~ 8993439	Counter Coil
B	SM	DDDD	0 ~ 4095	Special Relay
B	D_Bit	DDDDDDDDh	0 ~ 10117631f	Data Register
B	SD_Bit	DDDDh	0 ~ 4095f	Special Register
B	W_Bit	HHHHHHHh	0 ~ 9a61fff	Link Register
B	SW_Bit	HHHHHHHh	0 ~ 9a61fff	Link Special Register
B	R_Bit	DDDDh	0 ~ 32767f	
B	ZR_Bit	HHHHHHHh	0 ~ 827fff	
B	ZR_Dec_Bit	DDDDDDDDh	0 ~ 8552447f	
W	TN	DDDDDDDD	0 ~ 8993439	Timer Current Value
W	SN	DDDDDDDD	0 ~ 8993439	Retentive Timer Current
W	CN	DDDDDDDD	0 ~ 8993439	Counter Current Value
W	D	DDDDDDDD	0 ~ 10117631	Data Register
W	W	HHHHHHH	0 ~ 9a61ff	Link Register
W	SW	HHHHHHH	0 ~ 9a61ff	Special Link Register
W	SD	DDDD	0 ~ 4095	Special Register
W	Z	DD	0 ~ 23	Index Register
W	R	DDDD	0 ~ 32767	
W	ZR	HHHHHHH	0 ~ 827fff	
W	ZR_Dec	DDDDDDDD	0 ~ 8552447	

Wiring Diagram:

Ethernet cable:

