

# Siemens S7-1200/S7-1500 (S7CommPlus, Symbolic Addressing) (Ethernet)

Supported Series: Siemens S7-1500 series Ethernet.

Website: <http://www.siemens.com/entry/cc/en/>

## HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Siemens S7-1200/S7-1500 (S7CommPlus, Symbolic Addressing) (Ethernet)		
PLC I/F	Ethernet		
Port no.	102		

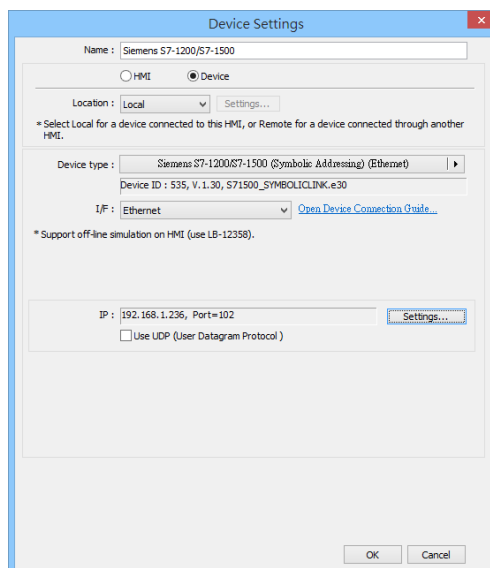
On-line simulator	Yes	Multi-HMI connect	Yes (Max:3 HMI)
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## Limitations:

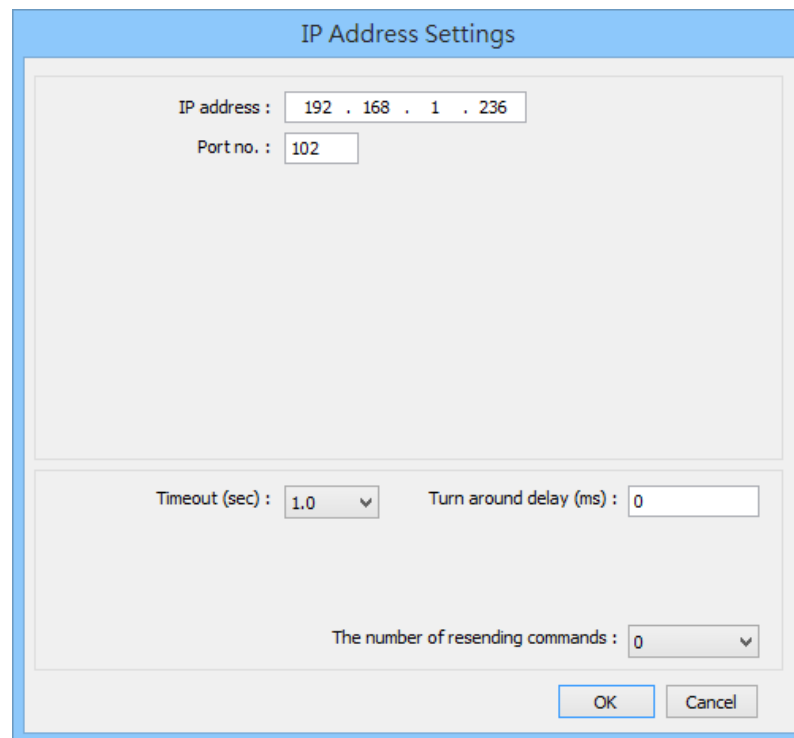
1. Unicode is not supported (tag).
2. Not supported on iP/iE Series HMI models.

## Get Tags:

1. In S7-1500 program software create PLC program and tag and then download to PLC.
2. Select Go offline, EasyBuilder will connect to PLC and get tag data. In PLC type select **"Siemens S7-1200/S7-1500 (S7CommPlus, Symbolic Addressing) (Ethernet)"**.



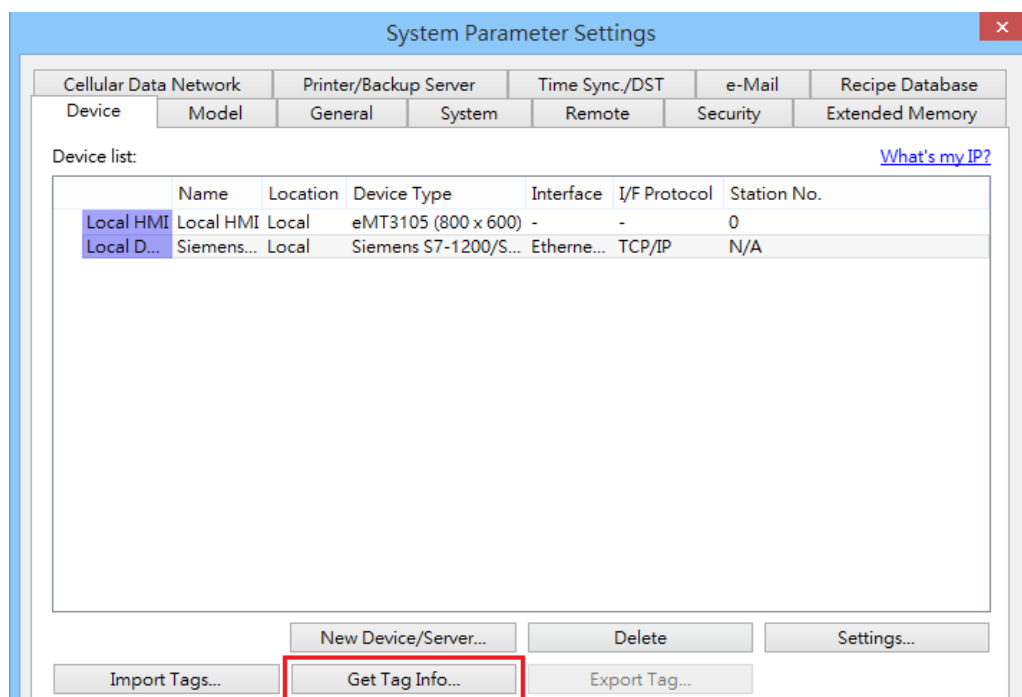
3. Click “**Settings...**”, input PLC IP address.



The IP Address Settings dialog box contains the following fields:

- IP address : 192 . 168 . 1 . 236
- Port no. : 102
- Timeout (sec) : 1.0 (dropdown)
- Turn around delay (ms) : 0
- The number of resending commands : 0 (dropdown)
- Buttons: OK, Cancel

4. Check the PLC that is not connected to any PC. Click “**Get Tag Info...**”.

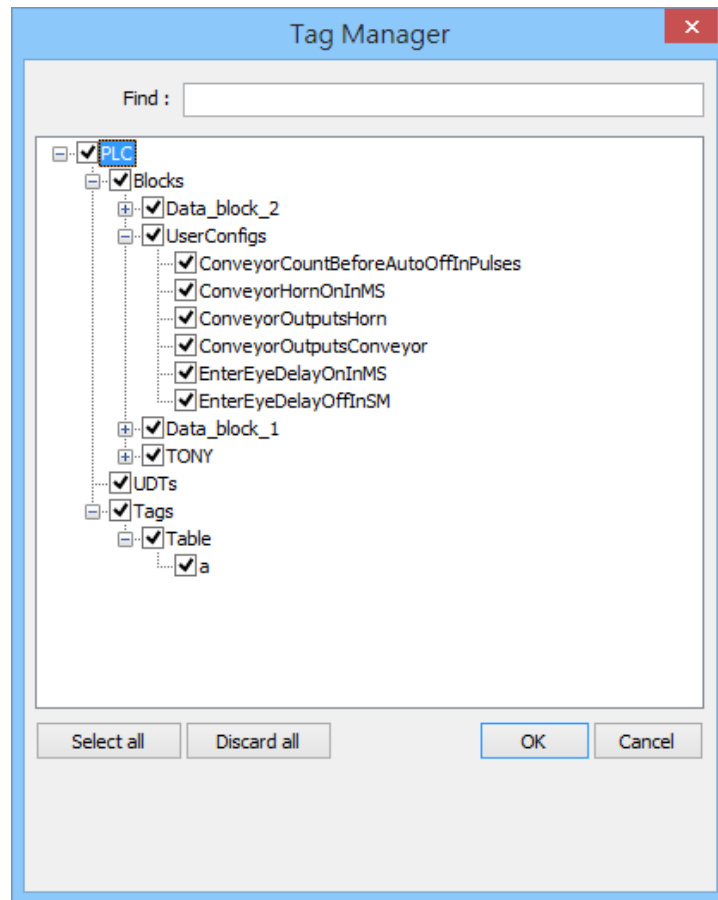


The System Parameter Settings dialog box features a tabbed interface with the following tabs: Cellular Data Network, Printer/Backup Server, Time Sync./DST, e-Mail, Recipe Database, Device, Model, General, System, Remote, Security, and Extended Memory. The 'Device' tab is active, displaying a 'Device list' table with the following data:

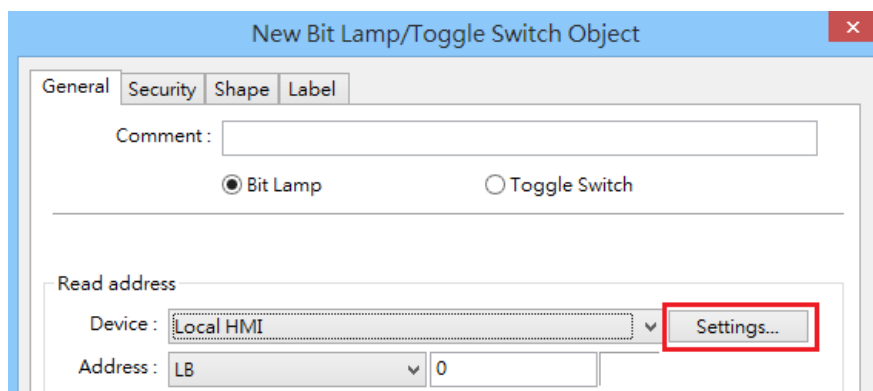
	Name	Location	Device Type	Interface	I/F Protocol	Station No.
Local HMI	Local HMI	Local	eMT3105 (800 x 600)	-	-	0
Local D...	Siemens...	Local	Siemens S7-1200/S...	Etherne...	TCP/IP	N/A

Below the table, there are several buttons: New Device/Server..., Delete, Settings..., Import Tags..., **Get Tag Info...** (highlighted with a red box), and Export Tag... A link labeled 'What's my IP?' is also present in the top right corner of the device list area.

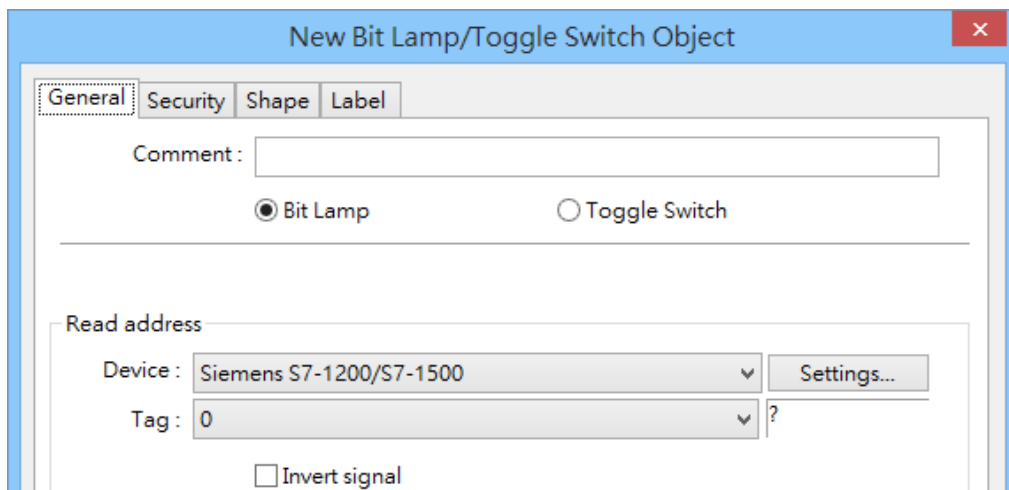
5. Added Tag Manager that allows selecting the Siemens S7-1500 PLC tags to be imported.



6. Create an object and click read address "**Settings...**"



7. In PLC name select S7-1200/1500 then click Tag.



**New Bit Lamp/Toggle Switch Object**

General Security Shape Label

Comment :

☒ Bit Lamp ☐ Toggle Switch

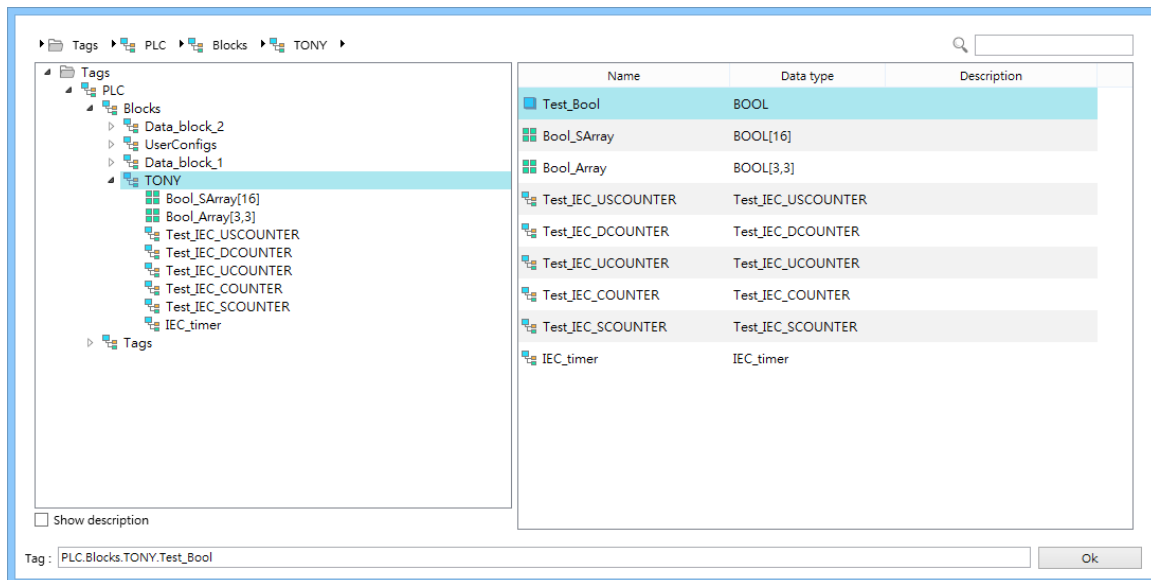
Read address

Device : Siemens S7-1200/S7-1500

Tag : 0 

☐ Invert signal

8. Select PLC tag.



Tags PLC Blocks TONY

Tags

- PLC
  - Blocks
    - Data\_block\_2
    - UserConfigs
    - Data\_block\_1
    - TONY
      - Bool\_SArray[16]
      - Bool\_Array[3,3]
      - Test\_IEC\_USCOUNTER
      - Test\_IEC\_DCOUNTER
      - Test\_IEC\_UCOUNTER
      - Test\_IEC\_COUNTER
      - Test\_IEC\_SCOUNTER
      - IEC\_timer

Tags

Name	Data type	Description
Test_Bool	BOOL	
Bool_SArray	BOOL[16]	
Bool_Array	BOOL[3,3]	
Test_IEC_USCOUNTER	Test_IEC_USCOUNTER	
Test_IEC_DCOUNTER	Test_IEC_DCOUNTER	
Test_IEC_UCOUNTER	Test_IEC_UCOUNTER	
Test_IEC_COUNTER	Test_IEC_COUNTER	
Test_IEC_SCOUNTER	Test_IEC_SCOUNTER	
IEC_timer	IEC_timer	

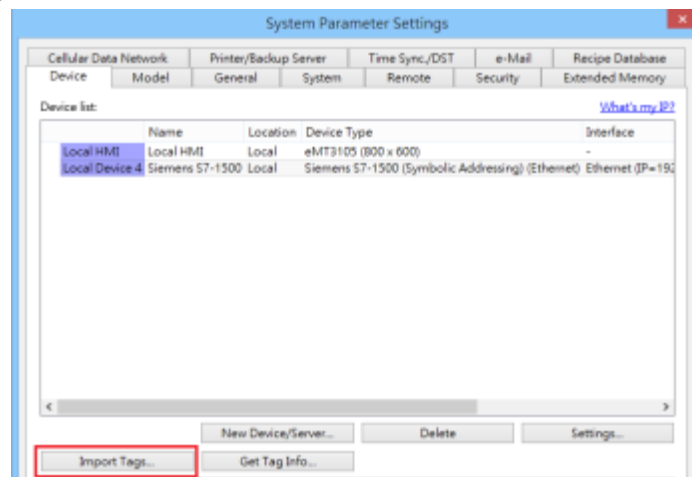
☐ Show description

Tag : PLC.Blocks.TONY.Test\_Bool

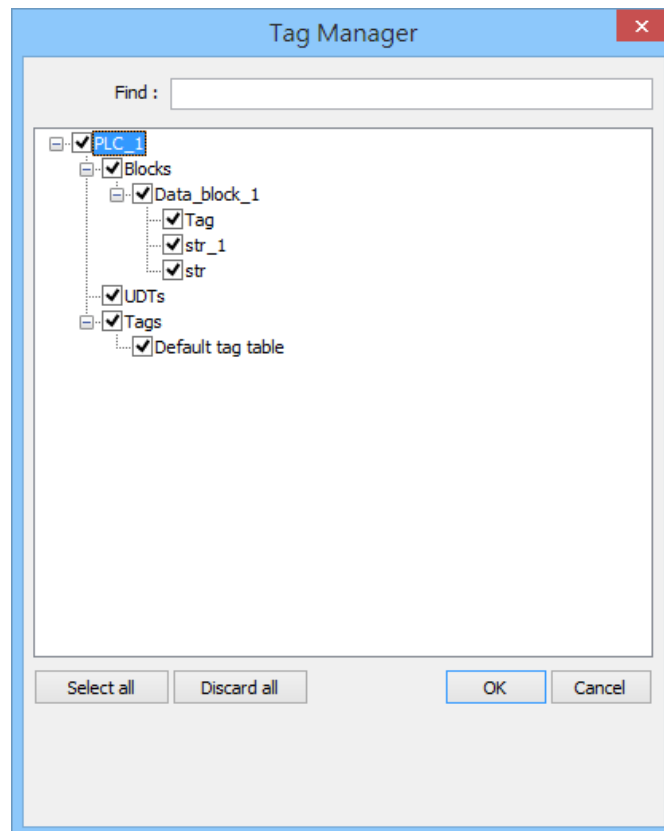
## Import Tags

Apart from using Get Tag on HMI, tags from Siemens TIA project can be imported in EasyBuilder Pro.

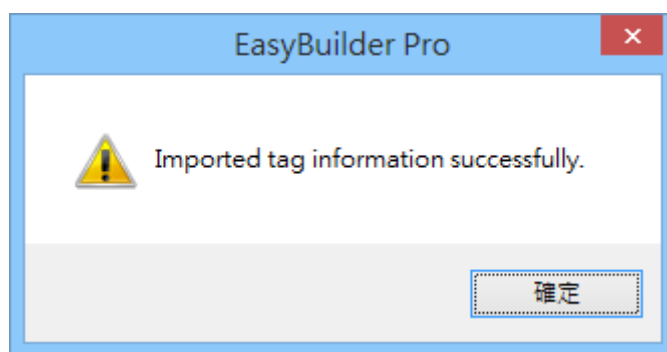
1. In System Parameter Settings add S7-1200/1500 into the device list and then click **[Import Tags...]**.



2. Select the **\*.apxx(12~16)** file.
3. Select the tags to be imported and then click **OK**.



4. Tags are imported successfully.



## Support Device Type:

S7-1500 data type	EasyBuilder data format	Memo
Bool	bit	
Byte	16-bit BCD, Hex, Binary, Unsigned	8-bit
SInt	16-bit BCD, Hex, Binary, Signed	8-bit
USInt	16-bit BCD, Hex, Binary, Unsigned	8-bit
Word	16-bit BCD, Hex, Binary, Unsigned	16-bit
Int	16-bit BCD, Hex, Binary, Signed	16-bit
UInt	16-bit BCD, Hex, Binary, Unsigned	16-bit
DWord	32-bit BCD, Hex, Binary, Unsigned	32-bit
DInt	32-bit BCD, Hex, Binary, Signed	32-bit
Real	32-bit Float	32-bit
UDInt	32-bit BCD, Hex, Binary, Unsigned	32-bit
DTL		
IEC_COUNTER		
IEC_DCOUNTER		
IEC_SCOUNTER		
IEC_UCOUNTER		
IEC_UDCOUNTER		
IEC_USCOUNTER		
Time	32-bit BCD, Hex, Binary, Unsigned	DWord
Time_Of_Day	32-bit BCD, Hex, Binary, Unsigned	DWord

S7-1500 data type	EasyBuilder data format	Memo
Array		Bool, Byte, SINT, USInt, Word, Int, UInt, DWord, Dint, Real, UInt
Struct		Bool, Byte, SINT, USInt, Word, Int, UInt, DWord, Dint, Real, UInt

## Wiring Diagram:

Ethernet cable:

