

## Siemens S7-300

Supported Series: Siemens S7-300 series PLC with PC Adapter

Website: <https://www.siemens.com/global/en.html>

### HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	SIEMENS S7-300		
PLC I/F	RS232		
Baud rate	19200	9600,19200	
Data bits	8		
Parity	Odd		
Stop bits	1		
PLC sta. no.	2		Must be same as the PLC setting.

### Device Address:

Bit/Word	Device type	Format	Range	Memo
B	I	DDDDo	0 ~ 40957	Input (I)
B	Q	DDDDo	0 ~ 40957	Output (O)
B	M	DDDDo	0 ~ 40957	Bit Memory
B	DBnBit	FFFFFFDDDDo	0 ~ 655359997	Data Register Bit
B	DBxBit	FFFFFFDDDDo	0 ~ 10700655327	
B	DB1Bit ~ DB99Bit	DDDDDo	0 ~ 655327	
W	IW	DDDD	0 ~ 4095	Input (I)
W	QW	DDDD	0 ~ 4095	Output (O)
W	MW	DDDD	0 ~ 4095	Bit Memory
DW	MD	DDDD	0 ~ 4094	
Byte	MB	DDDD	0 ~ 4095	Bit Memory Byte
Byte	DBBn	FFFFFFDDDD	0 ~ 655359999	Data Register Byte
Byte	DBBx	FFFFFFDDDD	0 ~ 1070065532	
W	DBx	FFFFFFDDDD	0 ~ 1070065532	
W	DBn	FFFFFFDDDD	0 ~ 655359999	Data Register (must be even)
DW	DBDn	FFFFFFDDDD	0 ~ 655359999	Data Register Double Word (must be even)
DW	DBDx	FFFFFFDDDD	0 ~ 1070065532	
W	DBn_String	FFFFFFDDDD	0 ~ 655359999	

Bit/Word	Device type	Format	Range	Memo
W	DBx_String	FFFFFFDDDD	0 ~ 1070065532	
W	DBn_String1	FFFFFFDDDD	0 ~ 655359999	
W	DBx_String1	FFFFFFDDDD	0 ~ 1070065532	
DW	DBDn_String	FFFFFFDDDD	0 ~ 655359999	Data Register Double Word (must be even)
DW	DBDx_String	FFFFFFDDDD	0 ~ 1070065532	
W	DB1-DB99	DDDD	0 ~ 8192	Data Register

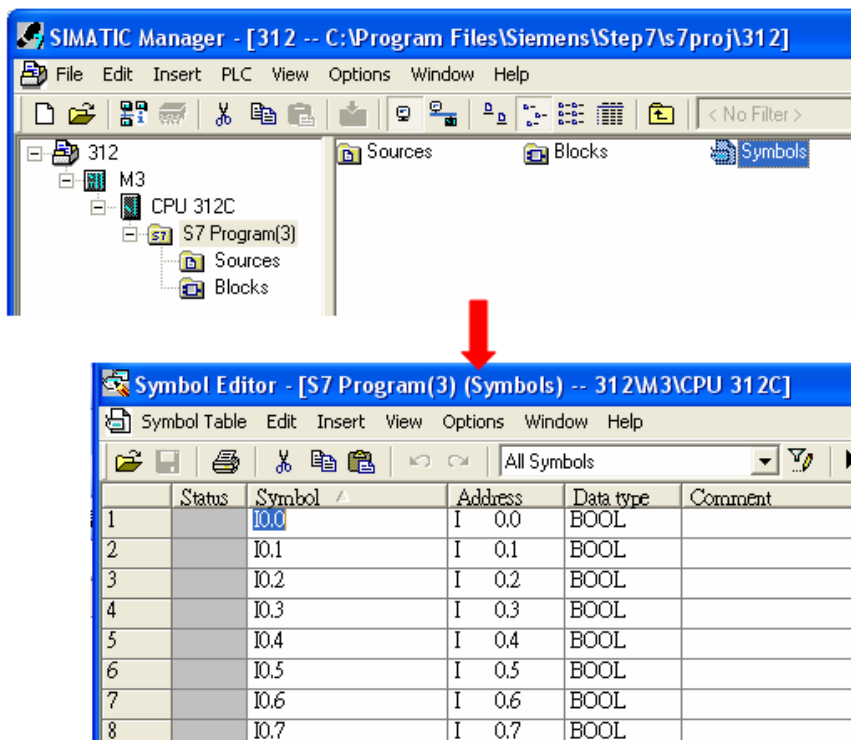
\* Double word and floating point value must use DBDn device type.

## How to Import Tag:

SIEMENS STEP 7 program allows building files of user-defined tag (\*.dif file and \*.AWL file), and import these files in EasyBuilder8000/EasyBuilderPro -> System Parameter Settings. The following describes how to build and import these two types of files.

### 1. Building \*.dif File

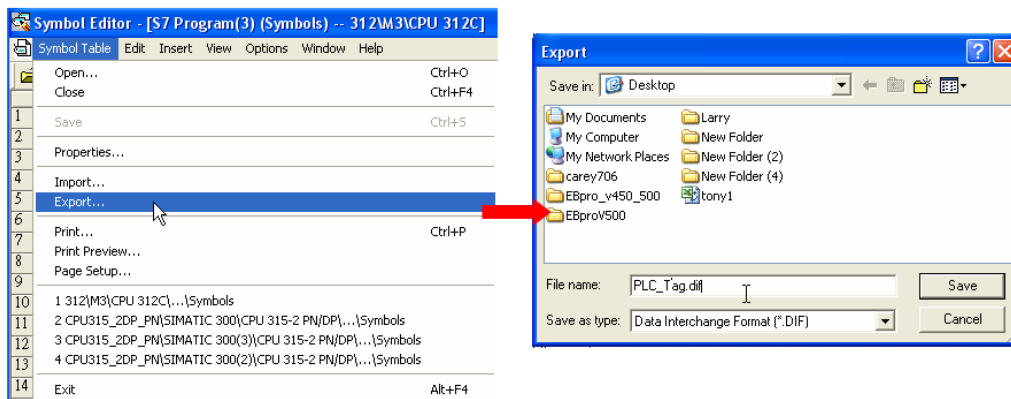
- a. In "Symbols" create user-defined tag.



The image shows two screenshots from SIMATIC Manager. The top screenshot shows the project tree with 'S7 Program(3)' selected, and the 'Symbols' view is active. A red arrow points from the 'Symbols' view to the bottom screenshot, which is the 'Symbol Editor' window. The Symbol Editor displays a table of symbols with the following columns: Status, Symbol, Address, Data type, and Comment.

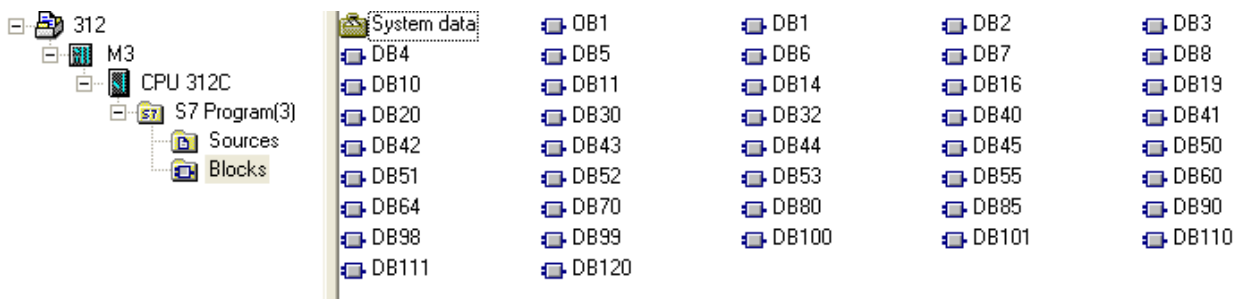
Status	Symbol	Address	Data type	Comment
	I0.0	I 0.0	BOOL	
	I0.1	I 0.1	BOOL	
	I0.2	I 0.2	BOOL	
	I0.3	I 0.3	BOOL	
	I0.4	I 0.4	BOOL	
	I0.5	I 0.5	BOOL	
	I0.6	I 0.6	BOOL	
	I0.7	I 0.7	BOOL	

b. Click **Export** to export the edited file and click **Save**.

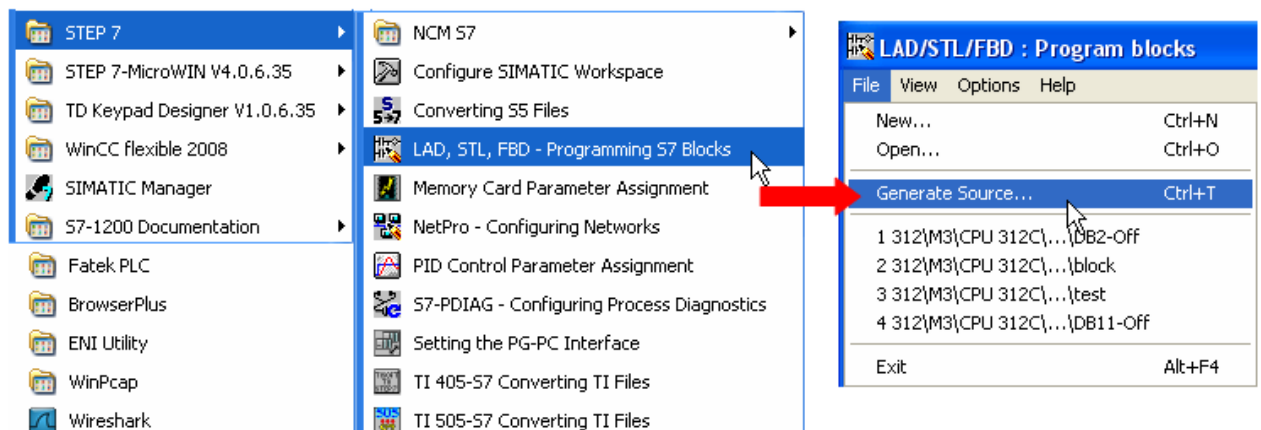


## 2. Building \*.AWF File

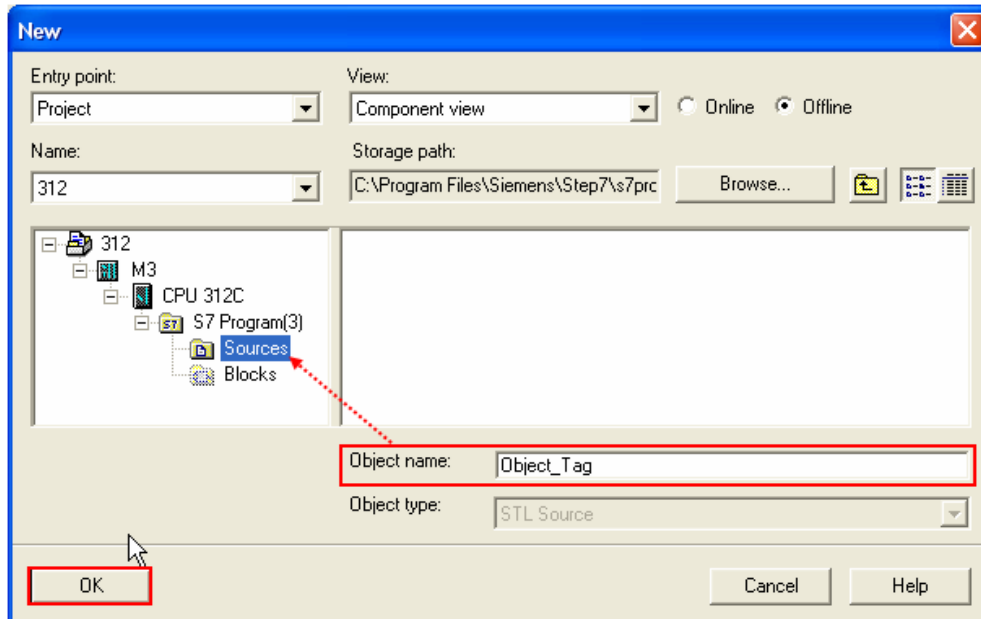
a. In **Blocks** create items as shown below:



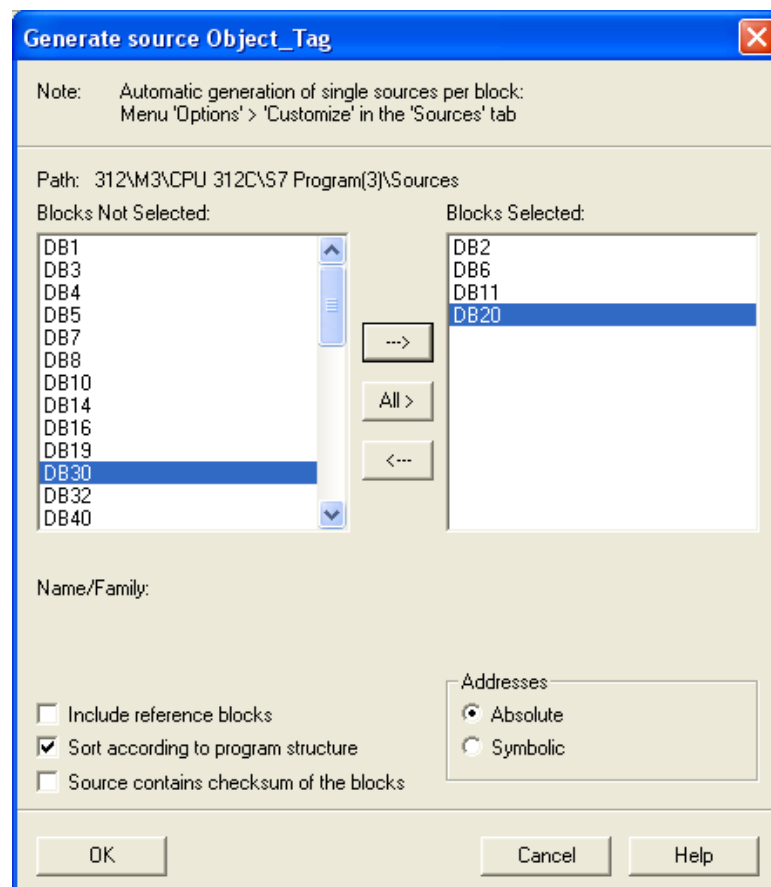
b. Open **LAD/STL, FBD – Programming S7 Blocks**, click **File -> Generate Source**.



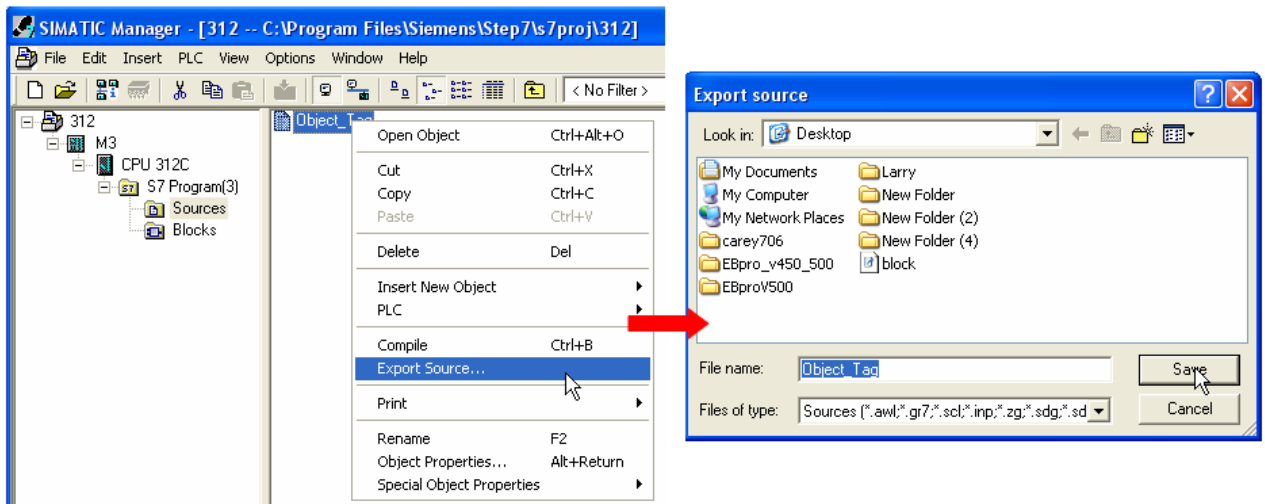
- c ․ Select **Sources** as storage path, specify the file name then click **OK**.



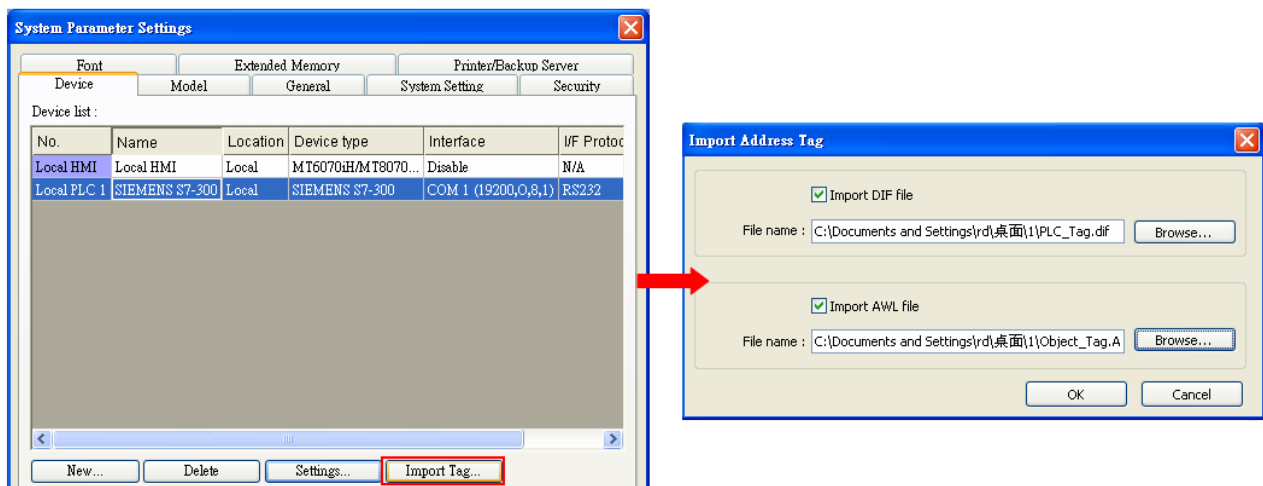
- d ․ Select the objects to be exported then click **OK**.



e、 Under **Sources** there will be names of the saved files, select **Export Source** to build \*.AWL file.



The generated \*.dif and \*.AWL files can be imported in EasyBuilder8000/EasyBuilderPro **System Parameter Settings**, by clicking **Import Tag**.



Tag information successfully imported.

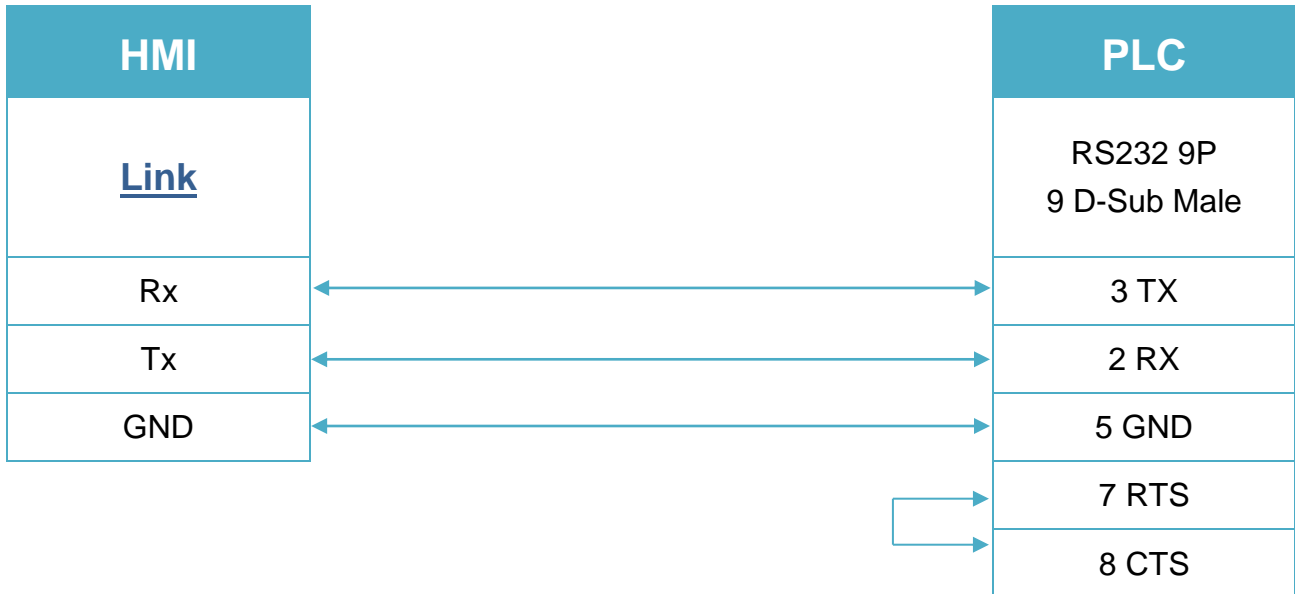


## Wiring Diagram:

### Diagram 1

#### RS-232 (Siemens S7-300 PC Adapter)

The serial port pin assignments may vary between HMI models, please click the following link for more information.



## Diagram 2

### RS-232 (Systeme Helmholz SSW7-TS)

The serial port pin assignments may vary between HMI models, please click the following link for more information.

