

iView HMI (& Siemens S7-300 MPI) Communication Tutorial



HMI solutions **you can view**

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Introduction

This tech note introduces how to connect **Siemens S7-300 MPI Port** with iView HMI.



Siemens S7-300 CPU

MPI Port



IMO iView HMI

PLC Parameter Setting

a) Execute the “STEP7” software to link with the S7-300 CPU via PC Adapter programming cable.



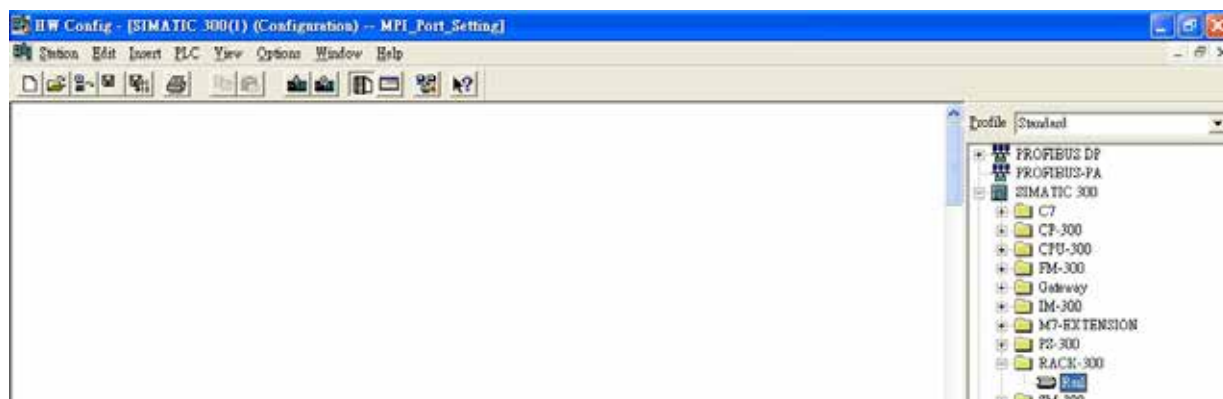
b) Create a new project following the steps below and set the CPU communication format.



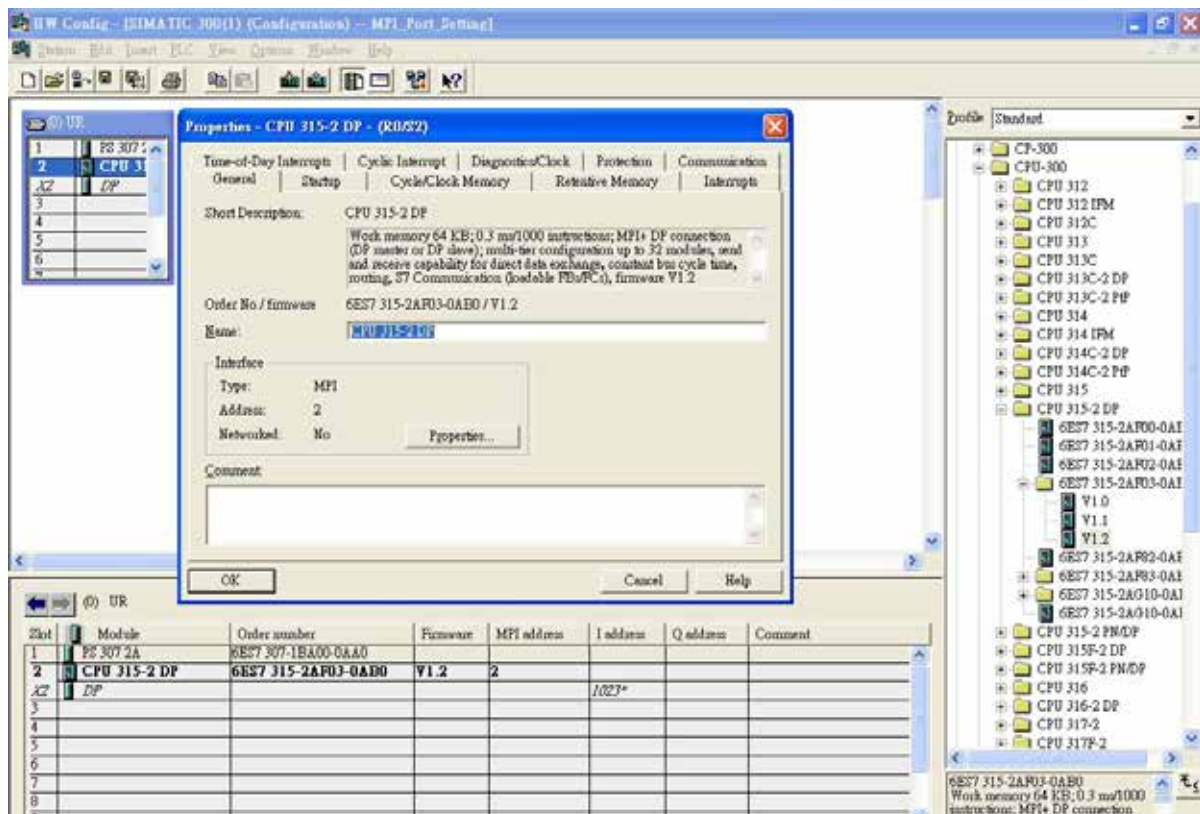
c) Create the S7-300 Station



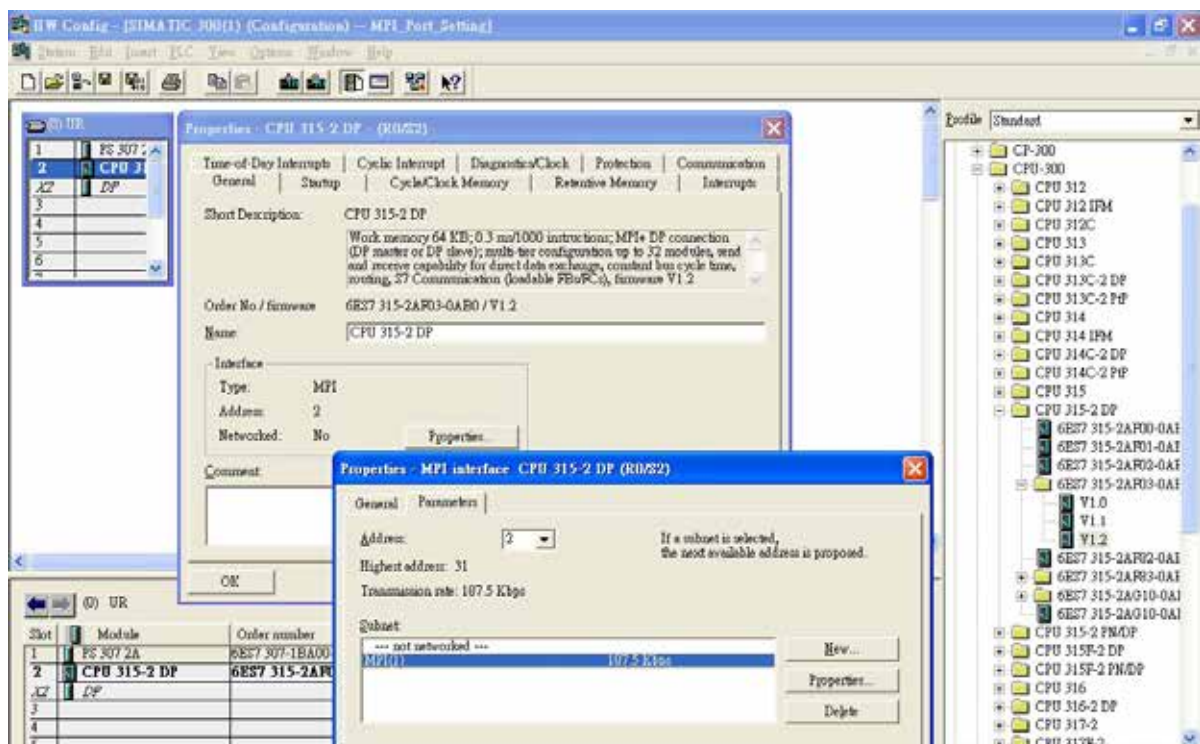
d) Enter “Hardware” option



e) Insert a “Rail” from RACK option



f) Insert a “CPU” unit into slot2, double-click it enter the properties window. Under CPU properties window, you can see the standard transmission rate is 187.5Kbps. Please use it to link with iView series HMI directly.



Note:

We will suggest not to set “0” or “1” for the PLC and HMI address node. Node “0”: reserved for PC / WinCC. Node “1”: Step7 Software.

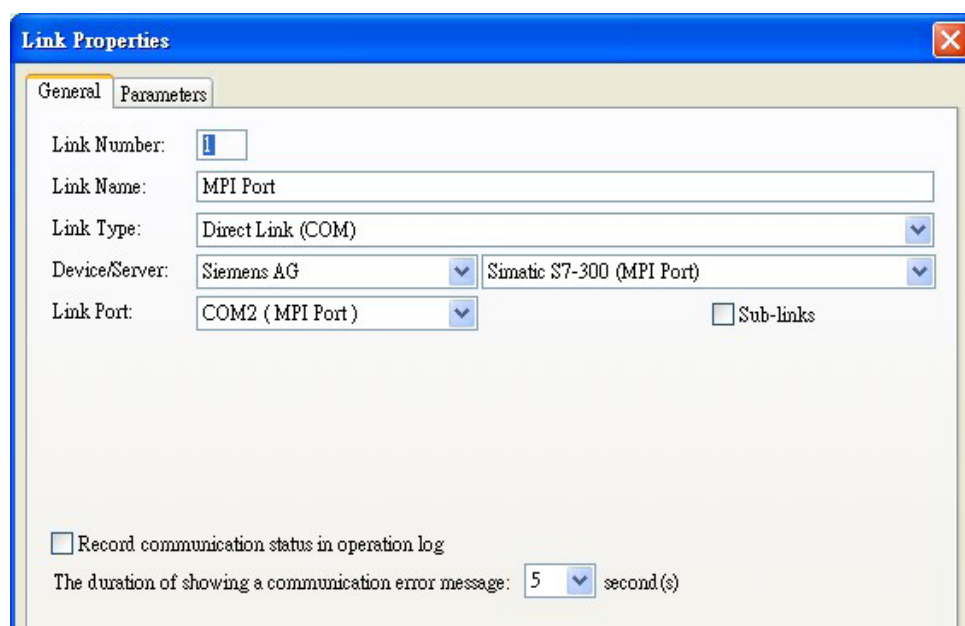
Connection Cable Diagram

HMI Side			PLC Cable Side	
COM1 9-PIN Male			MPI Port 9-PIN Male (RS485)	
485 +	1		3	485+
485 -	6		8	485-
SG	5		5	SG

HMI Side			PLC Cable Side	
COM2 T.B. 5-PIN			MPI Port 9-PIN Male (RS485)	
485 +	1		3	485+
485 -	2		8	485-
SG	5		5	SG

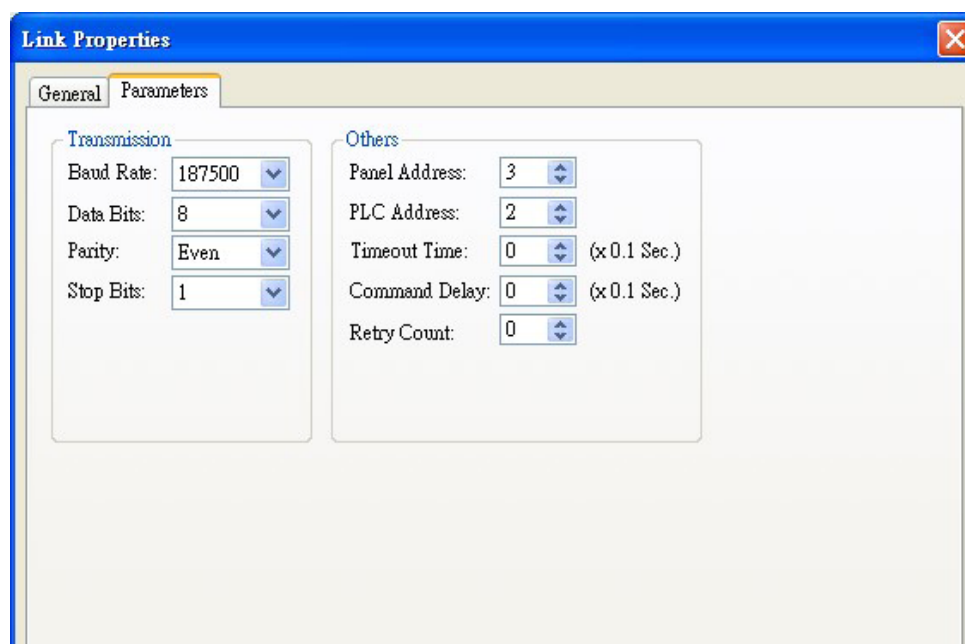
HMI Setting

a) Select [Device/Server: Siemens AG → Simatic S7-300 (MPI Port)]



NOTE: Driver named as C39021.dll and C39021.mod

b) Set the HMI link port parameter identical with PLC communication parameter



PLC Memory Address

Bit Devices:

Bit Device (Simatic S7-300 (MPI Port))			
Bit Device	Address Range	Block Address	Comment
DBm.DBXn.b	m: 1~255; n: 0~65535; b: 0~7	b=0	DBm.DBXn.b
DBXn.b	n: 0~65535; b: 0~7	b=0	
In.b	n: 0~65535; b: 0~7	b=0	
Mn.b	n: 0~65535; b: 0~7	b=0	
Qn.b	n: 0~65535; b: 0~7	b=0	
Vn.b	n: 0~65535; b: 0~7	b=0	

NOTE: Device named DBXn.b specified same as DB10.DBXn.b.

Word Devices:

Word Device (Simatic S7-300 (MPI Port))			
Word Device	Address Range	Size	Comment
Cn	n: 0~65534	Word	
DBm.DBDbn	m: 1~255; n: 0~65532; n=4q	32 bits	DBm.DBDbn
DBm.DBWn	m: 1~255; n: 0~65534; n=2q	Word	
DBDbn	n: 0~65532; n=4q	32 bits	
DBWn	n: 0~65534; n=2q	Word	
IDn	n: 0~65532; n=4q	32 bits	
IWn	n: 0~65534; n=2q	Word	
MDn	n: 0~65532; n=4q	32 bits	
MWn	n: 0~65534; n=2q	Word	
QDn	n: 0~65532; n=4q	32 bits	
QWn	n: 0~65534; n=2q	Word	
Tn	n: 0~65534	Word	
VDn	n: 0~65532; n=4q	32 bits	
VWn	n: 0~65534; n=2q	Word	

NOTE: Device named DBDbn/VDn specified same as DB10.DBDbn.

Notes

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