Siemens S7 200 (ISO TCP)

HMI Factory Setting:

IP Address: 192.168.0.1

COM Port: 102

Control Area / Status Area: VW0 / VW20

Connection

Standard Jumper Cable / Network Cable without jumper (Auto-detected by HMI)

Definition of PLC Read/Write Address

a. Registers

Type	Format Word No. (n)	Read/Write Range	Data Length	Note
Timer	**T**n	**T**0 – **T**255	Word	
Analog input word	**AIW**n	**AIW**0 – **AIW**30	Word	1
Counter	**C**n	**C**0 – **C**255	Word	
Analog output word	**AQW**n	**AQW**0 – **AQW**30	Word	1
Input Image	**IW**n	**IW**0 – **IW**14	Word	
Input Image	**ID**n	**ID**0 – **ID**12	Double Word	
Output Image	**QW**n	**QW**0 – **QW**14	Word	
Output Image	**QD**n	**QD**0 – **QD**12	Double Word	
Special Bits	**SMW**n	**SMW**0 – **SMW**199	Word	
Special Bits	**SMD**n	**SMD**0 – **SMD**197	Double Word	
Internal Bits	**MW**n	**MW**0 – **MW**98	Word	
Internal Bits	**MD**n	**MD**0 – **MD**96	Double Word	
Data Area	**VW**n	**VW**0 – **VW**9998	Word	
	DBWn	**DBW**0 – **DBW**9998		
Data Area	**VD**n	**VD**0 – **VD**9996	Double Word	
Special S	**SW**n	**SW**0 – **SW**99	Word	
Special S	**SD**n	**SD**0 – **SD**97	Double Word	

b. Contacts

Type	Format Word No. (n) Bit No. (b)	Read/Write Range	Note

Input Image	In.b	I0.0 – I15.7	
Output Image	Qn.b	Q0.0 – Q15.7	
Special Bit	SMn.b	SM0.0 – SM200.7	
Internal Bit	Mn.b	M0.0 – M99.7	
Data Area Bit	Vn.b	V0.0 – V9999.7	
Special S Bit	Sn.b	S0.0 – S100.7	

NOTE

1) n must be an even number.

2) S7-200 processes a longer period of internal program scanning or inputs an interruption command may slows down HMI response rate and cause "Must Retry" or "No Such Resource" error message. Communication Delay function is suggested to avoid this problem. The parameter setting unit is ms and suggested setting value is 10. The setting value should not be greater than 30.
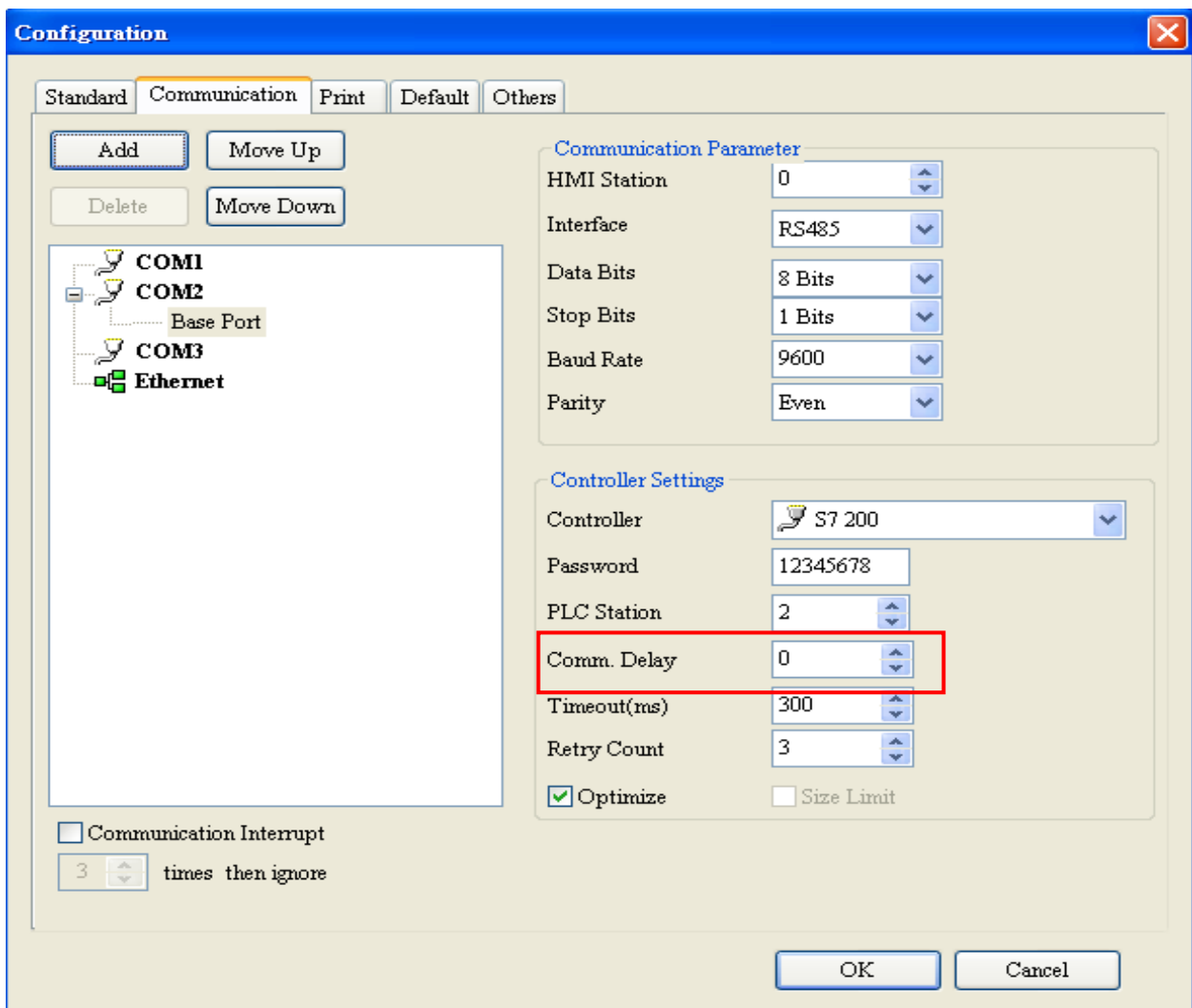
3) Except register Tn and Cn，data type of register is Byte and its order is opposite to usual controller , for example：

 1、 IW3 is a word which combined from IB3 and IB4，High Byte of IW3 is IB3；Low Byte of IW3 is IB4.

 2、 ID3 is Double Word which combined from IB3, IB4, IB5 and IB6, and its order from highest to lowest is IB3, IB4, IB5 andIB6.

And please be attentive to use these registers, because their Data type is different with Data Length, it will need more than one register for each access, for example:

 1、 AIW6 which Data Type is Byte and Data Length is 1 Word, when it used for one word Numeric Entry , it will occupy two addresses AIB6 and AIB7。

 2、 MD12 which Data Type is Byte and Data Length is Double Word，when it used for one word Numeric Entry, it will occupy four addresses MB12,MB13,MB14 and MB15；But data only stored in MB14 and MB15.

 3、 IW3 which Data Type is Byte and Data Length is 1 Word , when it used for double word Numeric Entry, it will occupy for addresses IB3,IB4,IB5 and IB6，order from highest to lowest byte is IB5,IB6,IB3 和 IB4.