



# Device/PLC Connection Manuals



**About the Device/PLC Connection Manuals** 

Prior to reading these manuals and setting up your device, be sure to read the "Important: Prior to reading the Device/PLC Connection manual" information. Also, be sure to download the "Preface for Trademark Rights, List of Units Supported, How to Read Manuals and Documentation Conventions" PDF file. Furthermore, be sure to keep all manual-related data in a safe, easy-to-find location.

# A

# **GE Fanuc Automation**

### **A.1**

# **Maximum Number of Consecutive Device Address**

The following lists the maximum number of consecutive addresses that can be read by each PLC. Refer to these tables to utilize *Block Transfer*.



When the device is setup using the methods below, the Data Communication Speed declines by the number of times the device is read.

- When consecutive addresses exceed the maximum data number range
- When an address is designated for division
- When device types are different

To speed up data communication, plan the tag layout in screen units, as consecutive devices. (Includes the Alarm and Trend screens.)

# **■ PLC**

#### <SNP-X Protocol>

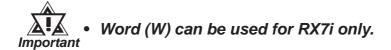
	Max. No. of
Device	Consecutive
	Address
Input Relay I	
Output Relay Q	
Internal Relay M	
Global Relay G	
Momentary Relay T	
System Function	
Relay SA	128 Words
System Function	
Relay SB	
System Function	
Relay SC	
Register R	
Analog Input AI	
Analog Output AQ	

#### <GE FANUC 90-30/90-70 SNP>

	Max. No. of	
Device	Consecutive	
	Address	
Input Relay I		
Output Relay Q		
Internal Relay M		
Global Relay G		
Temporary Relay T		
System Status Relay SA	250 Words	
System Status Relay SB	230 Words	
System Status Relay SC		
System Status Relay S		
Register R		
Analog Input AI		
Analog Input AQ		

# <GE FANUC 90-30/90-70/RX7i Ethernet>

Device	Max. No. of		
	Consecutive Addresses		
Input Relay (I)			
Output Relay (Q)			
Internal Relay (M)	60 Words		
Global Relay (G)			
Momentary Relay (T)			
System Function Relay (SA)			
System Function Relay (SB)			
System Function Relay (SC)			
System Function Relay (S)			
Register (R)			
Analog Input (AI)	250 Words		
Analog Output (AQ)			
Word (W)			



# A.2 Device Codes and Address Codes

Device codes and address codes are used to specify indirect addresses for the E-tags or K-tags.

The word addresses of data to be displayed are coded and stored in the word address specified by the E-tags and K-tags. (Code storage is done either by the PLC, or with T-tag and K-tags)

# **■ PLC**

<Series 90-70/90-30 (SNP-X protocol)>

	Device	Word Address	Device code (HEX)	Address code	
Bit Device	Input Relay (I)	100001~	8000	Save as word address value minus 1 divided by 16.	
	Output Relay (Q)	Q00001~	8800	Save as word address value minus 1 divided by 16.	
	Internal Relay (M)	M00001~	9000	Save as word address value minus 1 divided by 16.	
	Global Relay (G)	G0001~	C 200	Save as word address value minus 1 divided by 16.	
	Momentary Relay (T)	T001~	9400	Save as word address value minus 1 divided by 16.	
	System Function Relay (SA)	SA001~	A200	Save as word address value minus 1 divided by 16.	
	System Function Relay (SB)	SB001~	A400	Save as word address value minus 1 divided by 16.	
	System Function Relay (SC)	SC001~	A800	Save as word address value minus 1 divided by 16.	
	System Function Relay (S)	S001~	AA00	Save as word address value minus 1 divided by 16.	
Word Device	Register (R)	R00001~	0000	Save as word address value minus 1.	
	Analog Input (AI)	AI0001~	0A00	Save as word address value minus 1.	
	Analog Output (AQ)	AQ0001~	0C00	Save as word address value minus 1.	
	LS area	LS0000~	4000	Word Address	

# <Series 90-70/90-30 (SNP protocol)>

	Device	Word Address	Device Code	Address Code
	Input Relay (I)	100001~	8000	Save as: word address value minus 1, then
		100001~		divided by 16
	Output Relay (Q)	Output Relay (Q) Q00001~	- 8800	Save as: word address value minus 1, then
	Q00001	200001~		divided by 16
Bit Device	Internal Relay (M) M00001~	9000	Save as: word address value minus 1, then	
		101000011-	9000	divided by 16
	Global Relay (G)	Global Relay (G) G0001~	C 200	Save as: word address value minus 1, then
	G0001~	C 200	divided by 16	
	Temporary Relay (T) T001~	9400	Save as: word address value minus 1, then	
			divided by 16	
	System Status Relay	em Status Relay SA001~	A200	Save as: word address value minus 1, then
	(SA)	371001		divided by 16
	System Status Relay	tus Relay SB001~	A400	Save as: word address value minus 1, then
	(SB)	A400	divided by 16	
	System Status Relay	System Status Relay SC001~	A800	Save as: word address value minus 1, then
	(SC)	71000	divided by 16	
	System Status Relay (S)	AA00	Save as: word address value minus 1, then	
			divided by 16	

# <GE FANUC 90-30/90-70/RX7i Ethernet>

Device	Word Address	Device Code
Input Relay (I)	100001 ~	0x8000
Output Relay (Q)	Q00001 ~	0x88x0
Internal Relay (M)	M00001 ~	0x9000
Global Relay (G)	G0001 ~	0xC200
Momentary Relay (T)	T0001 ~	0x9400
System Status Relay (SA)	SA001 ~	0xA200
System Function Relay (SB)	SB001 ~	0xA400
System Function Relay (SC)	SC001 ~	008Ax0
System Function Relay (S)	S001 ~	0xAA00
Register (R)	R00001 ~	0x0000
Analog Input (AI)	AI00001 ~	0x0A00
Analog Output (AQ)	AQ00001 ~	0x0C00
Word (W)	W000001 ~	0x1000
	W0065537 ~	0x1200
	W0131073 ~	0x1400
	W0196609 ~	0x1600
	W0262145 ~	0x1800
	W0327681 ~	0x1A00
	W0393217 ~	0x1C00
	W0458753 ~	0x1E00
	W0524289 ~	0x2000
	W0589825 ~	0x2200
	W0655361 ~	0x2400
	W0720897 ~	0x2600
	W0786433 ~	0x2800
	W0851969 ~	0x2A00
	W0917505 ~	0x2C00
	W0983041 ~	0x2E00
	W1048577 ~	0x3000
	W1114113 ~	0x3200
	W1179649 ~	0x3400
	W1245185 ~	0x3600
	W1310721 ~	0x3800
	W1376257 ~	0x3A00
	W1441793 ~	0x3C00
	W1507329 ~	0x3E00
	W1572865 ~	0x4200
	W1638401 ~	0x4400
	W1703937 ~	0x4600
	W1769473 ~	0x4800
	W1835009 ~	0x4A00
	W1900545 ~	0x4C00
	W1966081 ~	0x4E00
	W2031617 ~	0x5000
	WWZ001017	0,0000



• Word (W) can be used for RX7i only.