Pro-face

Digital Human Machine Interface

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*.

Note: **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.)

■ PLCs

<SNP-X Protocol>

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

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

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

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)

■ PLCs

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

	Device	Word Address	Device code (HEX)	Address code
Bit Device	Input Relay (I)	I00001~	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~	C200	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
Bit Device	Input Relay (I)	I00001~	8000	Save as: word address value minus 1, then divided by 16
	Output Relay (Q)	Q00001~	8800	Save as: word address value minus 1, then divided by 16
	Internal Relay (M)	M00001~	9000	Save as: word address value minus 1, then divided by 16
	Global Relay (G)	G0001~	C200	Save as: word address value minus 1, then divided by 16
	Temporary Relay (T)	T001~	9400	Save as: word address value minus 1, then divided by 16
	System Status Relay (SA)	SA001~	A200	Save as: word address value minus 1, then divided by 16
	System Status Relay (SB)	SB001~	A400	Save as: word address value minus 1, then divided by 16
	System Status Relay (SC)	SC001~	A800	Save as: word address value minus 1, then divided by 16
	System Status Relay (S)	S001~	AA00	Save as: word address value minus 1, then divided by 16