# **Pro-face**





# 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

# **Hitachi Industrial Equipment Systems**

### **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.)

#### ■ PLCs

#### <HIDIC H (HIZAC H) Series>

Device	Maximum No. of	Device	Maximum No. of
	Consecutive Address	Device	Consecutive Address
External Input X	- 60 Words	Watchdog Timer WDT	
External Output Y		Monostable Timer MS	
Remote Input Relay X		Add Timer TMR	
Remote Output Relay Y		Up Counter CU	60 Bits
Internal Output R		Ring Counter RCU	
First CPU Link L		Up/Down Counter CT	
Second CPU Link L		Extended Timer TM	
Data Area M		Word Internal Output WR	
On-Delay Timer TD	60 Bits	Timer/Counter (Elapsed Value) TC	60 Words
		Network Link Area WN	oo words
Single Shot Timer SS		Extended Timer	
		(Elapsed Value) TV	

# **Ethernet Communication**

<HIDIC H Series>

	Maximum No. of	
Device	consecutive device	
	addresses read	
External Input		
External Output		
Remote Input Relay		
Remote Output Relay		
Internal Output		
First CPU Link	120 Words	
Second CPU Link		
Data Area		
Timer/C ounter		
(Elapsed Value)		
Word Internal Output		
Network Link Area		

# **■** Inverters

# <SJ300/L300P Series>

Device	Max. No. of Consecutive Addresses	
Monitor Data Batch Read	13 double words	
Read Inverter Status	4 words	
Read Trip History	55 double words	
Read/Set Setting Fields	1 double word	
Read Output Frequency Setting Value	1 double word	

# **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**

## <HIDIC H (HIZAC H) Series>

	Device	Word Address	Device Code (HEX)	Address Code
Bit Address	External Input	WX0000~	Х	Х
	External Output	WY0000~	Х	Х
	Remote Input Relay	WX1000~	Х	Х
	Remote Output Relay	WY1000~	Х	Х
	First CPU Link	WL000~	C 800	Word Address
	Second CPU Link	WL1000~	C 800	Word Address
	Data Area	WM000~	9000	Word Address
Word Address	Timer/C ounter (Elapsed Value)	TC 000~	6000	Word Address
	Extended Timer (Elapsed Value)	TV0000~	6200	Word Address
	Word Internal Output	WR0000~	0000	Word Address
	Network Link Area	WN 0000~	5000	Word Address
	LS Area	LS0000~	4000	Word Address

#### **■** Inverters

#### <SJ300/L300P Series>

Device	Word Address	Device Code
Normal Operation / Reverse Operation / Stop Command	00_00	0200
Frequency Value Setup	01_00	0440
Intelligent Terminal Status Setup	02_00 ~	0640
Monitor Data Batch Read	03_00 ~	0840
Read Inverter Status	04_00 ~	1200
Read Trip History	05_00 ~	1440
	A_001 ~	2040
	b_001 ~	3040
Read/Setup Setting Fields	C_001 ~	5040
Read/Setup Setting Frields	F_002 ~	1040
Γ	H_003 ~	6040
Γ	P_001 ~	7040
Re-initialize Setting Values	08_00	1600
Check if Setting Values can be saved to EEPROM or not	09_00	1800
Save Setting Values to EEPROM	0A_00	2200
Re-calculate Internal Constant	0B_00	2400
Read Output Frequency Setting Value	0E_00	2640
LS	LS000 ~	4040