

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

IDEC

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

<FA Series>

| Device | Max. No. of Consecutive Address |
|--------------------------------|---------------------------------|
| Input Relay XW | 100 Words |
| Output Relay YW | |
| Internal Relay MW | |
| Shift Register RW | |
| Data Register D | |
| Control Register D | |
| Timer (setup value) TS | |
| Timer (current value) T | |
| Timer 10msec (current value) H | |
| Counter (setup value) CS | |
| Counter (current value) C | |

<MICRO³>

| Device | Max. No. of Consecutive Address |
|------------------------------|---------------------------------|
| Input Relay X | 2 Words |
| Output Relay Y | |
| Internal Relay M | 13 Words |
| Shift Register R | 4 Words |
| Timer (setup value) T | 32 Words |
| Timer (calculated value) t | |
| Counter (setup value) C | |
| Counter (calculated value) c | |
| Data Register D | 100 Words |

<MICROSmart FC4A Series/OpenNet Controller FC3 Series>

| Device | Max. No. of Consecutive Addresses |
|---------------------------|-----------------------------------|
| Input X | 120 words |
| Output Y | |
| Internal Relay M | |
| Special Internal Relay M8 | |
| Shift Register R | |
| Timer T | 20 words |
| Timer t | |
| Counter C | |
| Counter c | |
| Data Register D | 120 words |
| Special Data Register D8 | |
| Link Register L | 1 word |

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

<FA Series>

| | Device | Word Address | Device code (HEX) | Address code |
|-------------|------------------------------|--------------|-------------------|---|
| Bit Device | Input Relay | WX00~ | 8000 | Save as word address value divided by 2. |
| | Output Relay | WY000~ | 8800 | Save as word address value divided by 2. |
| | Internal Relay | WM000~ | 9000 | Save as word address value divided by 2. |
| | Shift Register | WR000~ | C000 | Save as word address value divided by 16. |
| Word Device | Timer (set value) | TS000~ | 6800 | Word Address |
| | Timer (current value) | T000~ | 6000 | Word Address |
| | Timer 10msec (current value) | H000~ | 6400 | Word Address |
| | Counter (set value) | CS000~ | 7800 | Word Address |
| | Counter (current value) | C000~ | 7000 | Word Address |
| | Data Register | D0000~ | 0000 | Word Address |
| | Control Register | D3000~ | 0000 | Word Address |
| | LS area | LS0000~ | 4000 | Word Address |

<MICRO³ (Micro Cube)>

| | Device | Word Address | Device code (HEX) | Address code |
|-------------|-------------------------|--------------|-------------------|---|
| Bit Device | Input Relay | X0000~ | 8000 | Save as word address value divided by 2. |
| | Output Relay | Y0000~ | 8800 | Save as word address value divided by 2. |
| | Internal Relay | M0000~ | 9000 | Save as word address value divided by 2. |
| | Shift Register | R0000~ | C000 | Save as word address value divided by 16. |
| Word Device | Timer (set value) | T0000~ | 6800 | Word Address |
| | Timer (current value) | t0000~ | 6000 | Word Address |
| | Counter (set value) | C0000~ | 7800 | Word Address |
| | Counter (current value) | c0000~ | 7000 | Word Address |
| | Data Register | D0000~ | 0000 | Word Address |
| | LS area | LS0000~ | 4000 | Word Address |

<MICROSmart FC4A Series/OpenNet Controller FC3 Series>

| | Device | Word Address | Device code (HEX) | Address code |
|-------------|-----------------------------------|--------------|-------------------|--|
| Bit Device | Input | X000 ~ | 8000 | Save as word address value divided by 2 |
| | Output | Y000 ~ | 8800 | Save as word address value divided by 2 |
| | Internal Relay | M000 ~ | 9000 | Save as word address value divided by 2 |
| | Special Internal Relay | M800 ~ | 9800 | Save as word address value divided by 2 |
| | Shift Register | R0000 ~ | C000 | Save as word address value divided by 16 |
| Word Device | Timer (setup value) | T0000 ~ | 6800 | Word Address |
| | Timer (setup value) | t0000 ~ | 6000 | Word Address |
| | Counter (elapsed value) | C0000 ~ | 7800 | Word Address |
| | Counter (elapsed value) | c0000 ~ | 7000 | Word Address |
| | Data Register | D0000 ~ | 0000 | Word Address |
| | Special Data Register | D8000 ~ | 5000 | Word Address |
| | Link Register | L0100 ~ | 2000 | Word Address |
| | Enter Timer/Counter Setting Value | Q0 | 3000 | Word Address |
| | LS Area | LS0000 ~ | 4000 | Word Address |