

# 17 EXTERNAL DEVICE COMMUNICATION INSTRUCTION

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## 17.1 Serial Communication 2

### RS2

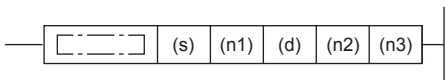
FX5S

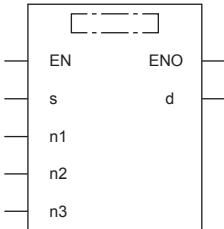
FX5UJ

FX5U

FX5UC

This instruction sends or receives data by non-protocol communication via serial ports of RS-232C or RS-485.

Ladder diagram	Structured text
	ENO:=RS2(EN,s,n1,n2,n3,d);

FBD/LD


### Setting data

#### ■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s)	Head device storing send data	—	16-bit signed binary/ character string	ANY16
(n1)	Number of bytes of data to be sent	0 to 4096	16-bit unsigned binary	ANY16_U
(d)	Head device storing receive data	—	16-bit signed binary/ character string	ANY16
(n2)	Number of bytes to be received	0 to 4096	16-bit unsigned binary	ANY16_U
(n3)	Communication channel	■FX5S/FX5UJ CPU module K2 to 4 ■FX5U CPU module K1 to 4 ■FX5UC CPU module K1, K3 to 4	16-bit unsigned binary	ANY16_U
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

## ■Applicable devices

Operand	Bit	Word			Double word		Indirect specification	Constant			Others
	X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC	LZ		K, H	E	\$	
(s)	—	○*1	—	—	—	—	○	—	—	—	—
(n1)	○	○	○	○	—	—	○	○	—	—	—
(d)	—	○*1	—	—	—	—	○	—	—	—	—
(n2)	○	○	○	○	—	—	○	○	—	—	—
(n3)	—	—	—	—	—	—	—	○	—	—	—

\*1 T, ST, and C cannot be used.

## Processing details

This instruction sends or receives data by non-protocol communication via the built-in RS-485 port or the optional RS-232C or RS-485 serial ports installed in the CPU module. This instruction specifies the head device storing the sent data from the CPU module, the number of data bytes, the head device storing the received data, and the maximum number of bytes that can be received. For details, refer to MELSEC iQ-F FX5 User's Manual (Communication).

## Precautions

- It is not permitted to use other external device communication instructions on the same port.
- While this instruction is being driven, the communication format cannot be changed. Set this instruction to OFF before changing the communication format.
- When using the header and terminator, set them before driving this instruction. Do not change the values of the header and terminator while this instruction is being driven.

For other precautions, refer to MELSEC iQ-F FX5 User's Manual (Communication).

## Operation error

Error code (SD0/SD8067)	Description
3405H	Data outside the allowable range was input.
2820H	The device specified by (s) or (d) exceeds the corresponding device range.
1810H	Channel number which is used in another instruction is specified.
3600H	Channel number specified by (n3) is not set by parameters.

For communication errors, refer to MELSEC iQ-F FX5 User's Manual (Communication).