

# 17.3 MODBUS Communication Instruction

## ADPRW

**FX5S** **FX5UJ** **FX5U** **FX5UC**

This instruction allows the MODBUS Master to communicate (read/write data) with the Slaves.

Ladder diagram	Structured text
	ENO:=ADPRW(EN,s1,s2,s3,s4,s5d1,d2);
FBD/LD	

### Setting data

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

Operand	Description	Range	Data type	Data type (label)
(s1)	Slave station No.	0 to F7H <sup>*1</sup>	16-bit signed binary	ANY16
(s2)	Function code	01H to 06H, 0FH, 10H	16-bit signed binary	ANY16
(s3)	Function parameters depending on the function code	0 to FFFFH	16-bit signed binary	ANY16
(s4)	Function parameters depending on the function code	1 to 2000	16-bit signed binary	ANY16
(s5)/(d1)	Function parameters depending on the function code	—	Bit/16-bit signed binary	ANY_ELEMENTARY <sup>*2</sup>
(d2)	Head bit device number to which the execution status of the communication is output	—	Bit	ANYBIT_ARRAY (Number of elements: 3)
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

\*1 Slave station No. that can be used in FX5 master station differs depending on the version. (☞ Page 1452 Added and Changed Functions)

\*2 Digit specified bit type label cannot be used.

#### ■ 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		K, H	E	\$	
(s1)	—	○ <sup>*1</sup>	○	○	—	—	○	○	—	—	—
(s2)	—	○ <sup>*1</sup>	○	○	—	—	○	○	—	—	—
(s3)	—	○ <sup>*1</sup>	○	○	—	—	○	○	—	—	—
(s4)	—	○ <sup>*1</sup>	○	○	—	—	○	○	—	—	—
(s5)/(d1)	○	○ <sup>*1</sup>	○	○	—	—	○	○	—	—	—
(d2)	○	○ <sup>*1</sup>	—	—	—	—	—	—	—	—	—

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

## Processing details

- Function code (s2) is operated on Slave station No. (s1) according to Parameters (s3), (s4), and (s5)/(d1). Use 0 as the Slave station No. for Broadcast commands. For details, refer to MELSEC iQ-F FX5 User's Manual (Communication).
- The communication execution status (d2) is output according to the status of the ADPRW instruction such as communicating/completed normally/completed with an error.

## Precuations

Three devices are occupied from the device specified in (d2). Make sure that these devices are not used in other controls.

## Operation error

Error code (SD0/SD8067)	Description
1810H	Channel used by the instruction is used by other instruction.
3600H	Invalid parameter setup.
2822H	Device that cannot be used by this instruction is specified.
3405H	Data outside the allowable range was input.
2820H	The specified device exceeds the range of the corresponding device.

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