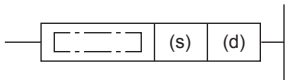
Converting 16-bit binary data to Gray code

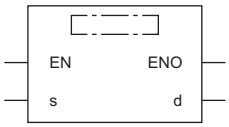
GRY(P)(_U)

FX5S FX5UJ FX5U FX5UC

These instructions convert the 16-bit binary data in the device specified by (s) to 16-bit binary gray code data, and store the converted data in the device specified by (d).

Ladder diagram	Structured text	
	ENO:=GRY(EN,s,d); ENO:=GRYP(EN,s,d);	ENO:=GRY_U(EN,s,d); ENO:=GRYP_U(EN,s,d);

FBD/LD



Setting data

■Descriptions, ranges, and data types

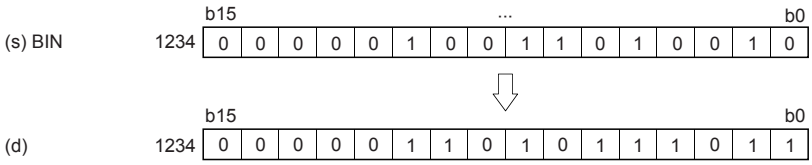
Operand		Description	Range	Data type	Data type (label)
(s)	GRY(P)	Binary data or the head device where the binary data is stored	0 to 32767	16-bit signed binary	ANY16_S
	GRY(P)_U		0 to 65535	16-bit unsigned binary	ANY16_U
(d)	GRY(P)	Head device for storing the gray code data after conversion	—	16-bit signed binary	ANY16_S
	GRY(P)_U			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)	○	○	○	○	—	—	○	○	—	—	—
(d)	○	○	○	○	—	—	○	—	—	—	—

Processing details

- These instructions convert the 16-bit binary data in the device specified by (s) to 16-bit binary gray code data, and store the converted data in the device specified by (d).



Precautions

The data conversion speed depends on the scan time of the CPU module.

Operation error

There is no operation error.