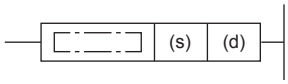
Converting 32-bit binary data to Gray code

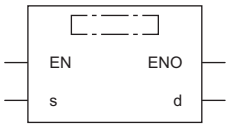
DGRY(P)(_U)

FX5S FX5UJ FX5U FX5UC

These instructions convert the 32-bit binary data in the device specified by (s) to 32-bit binary gray code data, and store the converted data in the device specified by (d).

Ladder diagram	Structured text	
	ENO:=DGRY(EN,s,d); ENO:=DGRYP(EN,s,d);	ENO:=DGRY_U(EN,s,d); ENO:=DGRYP_U(EN,s,d);

FBD/LD



Setting data

■Descriptions, ranges, and data types

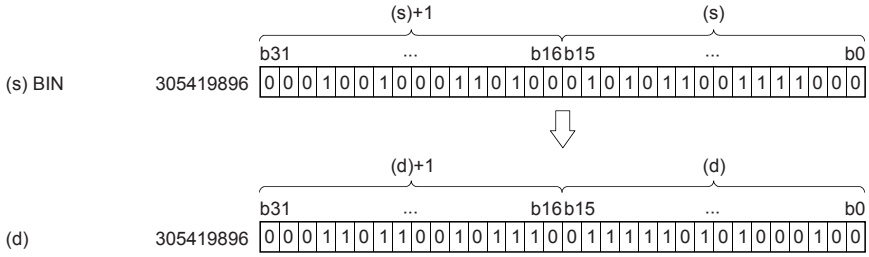
Operand		Description	Range	Data type	Data type (label)
(s)	DGRY(P)	Binary data or the head device where the binary data is stored	0 to 2147483647	32-bit signed binary	ANY32_S
	DGRY(P)_U		0 to 4294967295	32-bit unsigned binary	ANY32_U
(d)	DGRY(P)	Head device for storing the gray code data after conversion	—	32-bit signed binary	ANY32_S
	DGRY(P)_U			32-bit unsigned binary	ANY32_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 32-bit binary data in the device specified by (s) to 32-bit binary gray code data, and store the converted data in the device specified by (d).



(s)+1: Upper 16 bits
(s): Lower 16 bits

Precautions

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

Operation error

There is no operation error.