

# Calculating the mean value of 32-bit data

## DMEAN(P)(\_U)

**FX5S    FX5UJ    FX5U    FX5UC**

These instructions calculate the mean value of the (n) point(s) of 32-bit data units starting from the one specified by (s), and store the operation result in (d).

Ladder diagram	Structured text
	ENO:=DMEAN(EN,s,n,d); ENO:=DMEANP(EN,s,n,d); ENO:=DMEANP_U(EN,s,n,d);
<b>FBD/LD</b>	

### Setting data

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

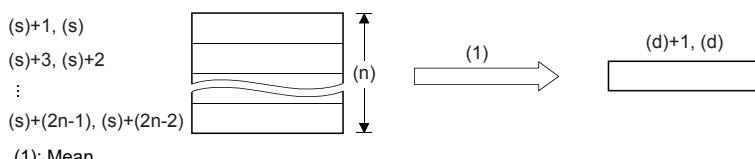
Operand	Description			Range	Data type	Data type (label)
(s)	DMEAN(P)	Head device number where the mean value target data are stored			—	32-bit signed binary
	DMEAN(P)_U				32-bit unsigned binary	ANY32_U
(d)	DMEAN(P)	Head device number storing mean value			32-bit signed binary	ANY32_S
	DMEAN(P)_U				32-bit unsigned binary	ANY32_U
(n)	Number of data or the device number storing the number of data			1 to 65535	16-bit unsigned binary	ANY16
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		K, H	E	\$	
(s)	○	○	○	—	○	—	○	—	—	—	—
(d)	○	○	○	○	○	○	○	—	—	—	—
(n)	○	○	○	○	—	—	○	○	—	—	—

### Processing details

- These instructions calculate the mean value of the (n) point(s) of 32-bit data starting from the one specified by (s), and store the operation result in a device specified by (d).



(1): Mean

- The sum is obtained as algebraic sum, and divided by (n).
- The remainder is ignored.

## Precautions

When a device number is exceeded, (n) is handled as a smaller value in the possible range.

## Operation error

Error code (SD0/SD8067)	Description
3405H	The value stored in a device specified by (n) is 0.