Batch read in bit units (command: 0401)

Read values from devices in bit units.

Point

When accessing any of the following devices, use the device extension specification (subcommand: 008☐).

- Link direct device
- Module access device
- CPU buffer memory access device

For the message format for device extension specification, refer to the following section.

☞ Page 438 Read/Write by Device Extension Specification

Message format

The following shows the message format of the request data and response data of the command.

■Request data

Command	Subcommand	Head device	Number of device points

■Response data

The value of read device is stored in bit units. The data order differs between ASCII code or binary code. (☞ Page 72 Read data, write data)

Data specified by request data

■Command

Frame	ASCII code	Binary code
4C/3C/4E/3E frame	0 4 0 1 30H 34H 30H 31H	01H 04H
2C frame	1 31H	—

■Subcommand

Type	ASCII code	Binary code
For MELSEC-Q/L series	0 0 0 1 30H 30H 30H 31H	01H 00H
For MELSEC iQ-R series	0 0 0 3 30H 30H 30H 33H	03H 00H

For 2C frame, the specification is not required. Functions and specification methods are equivalent to the subcommands for MELSEC-Q/L series.

■Head device

Specify the head device of the consecutive devices. (☞ Page 65 Devices)

Restriction

The following devices cannot be specified.

- Long timer (contact: LTS, coil: LTC)
- Long retentive timer (contact: LSTS, coil: LSTC)
- Long index register (LZ)

☞ Page 69 Considerations when accessing long timer, long retentive timer, or long counter

☞ Page 69 Considerations when accessing long index register

■Number of device points

Specify the number of device points to be read within the following range. (☞ Page 70 Number of device points)

Access target	C24	E71	
		ASCII code	Binary code
MELSEC iQ-R series module MELSEC iQ-L series module MELSEC-Q/L series module	1 to 7904 points	1 to 3584 points	1 to 7168 points
MELSEC-QnA series module Module on other station via MELSEC-QnA series network module	1 to 3952 points	1 to 1792 points	1 to 3584 points
MELSEC-A series module	1 to 256 points		

Communication example

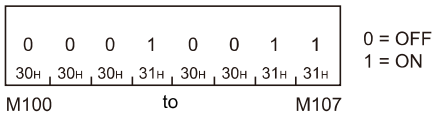
Read values of M100 to M107. (Subcommand: for MELSEC-Q/L series)

■Data communication in ASCII code

(Request data)

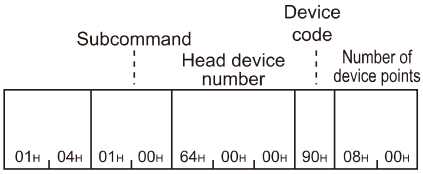
	Subcommand	Device code	Head device number	Number of device points
0 4 0 1	0 0 0 1	M *	0 0 0 1 0 0	0 0 0 8
30H 34H 30H 31H	30H 30H 30H 31H	4DH 2AH	30H 30H 30H 31H 30H 30H	30H 30H 30H 38H

(Response data)



■Data communication in binary code

(Request data)



(Response data)