Communication Protocol (RS232 or LAN)

	RS-232	LAN
Communication type	Half-duplex	Protocol:TCP/IP
Synchronization	ASYNC	IP address：192.168.209.XXX *
Data rate	9600 bps	Subnet mask:255.255.255.0
Data bit length	8 bits	IP PORT:27110
Stop bit length	1 bits	* XXX is the value obtained by converting the 2 digits (Hex) on the right side of the MAC address to Dec.
Parity bit	NONE	【Examples】
Header	None	00-16-FC-02-00-0A → XXX=10 （192.168.209.10）
Terminator	CR	00-16-FC-02-00-10 → XXX=16 （192.168.209.16）
Hand-shake	None	**This IP address can be change** .

Data Format

(1) CIM terminal PC or PLC -> reader (start of reading)

Software trigger command format

BYTE	1	2
Content	g	CR

[g] 67 hex (Fixed)

[CR] 0D hex (Fixed)

(2) Reader -> CIM terminal PC or PLC

1) Read data transmission format (when OK)

[Header] [Data] [Terminator]

2) Read data transmission format (when NG)

[Header] [Error code] [Terminator]

1. [Header]

Length: Depends on setting (default: 0 byte)

Content: Depends on setting (default: none)

2. [Data]

Read data

3. [Terminator]

Length: Depends on setting (default: 1 byte)

Content: Depends on setting (default : 0D hex)

(Examples)

Examples of the format for sending data from reading the ID shown below are given next.

2D code data

No. of digits :13

Data :123456789ABCD

Each [] contains a hexadecimal notation, and each [] represents 1 byte.

When read result is OK

[31] [32] [33] [34] [35] [36] [37] [38] [39] [41] [42] [43] [44] [0D]

Total 14 bytes

When read result is NG

[42][52][0D]

Total 3 bytes

When decoding fails while the SYNC signal is ON, an error code is sent to the CIM terminal PC or PLC.