

- Note**
1. V1 Communications Boards are compatible with C200HX/HG/HE-CPU□□-ZE CPU Units.
 2. EV1 Communications Boards are compatible with C200HX/HG/HE-CPU□□-ZE CPU Units and have improved protocol macro functionality.

1-1-4 DIP Switch Settings

To use port A (RS-422A/485) on the C200HW-COM03-V1 or C200HW-COM06-EV1, the DIP switches on the Communications Board must be set according to the application conditions.

RS-422A/485 Cable (SW1)

Set DIP switch SW1 as follows according to the type of the RS-422A/485 cable being used:

- 2-wire: Set to 2
- 4-wire: Set to 4

1-1-8 Communications Board Specifications

Item	C200HW-COM01	C200HW-COM02-V1	C200HW-COM03-V1	C200HW-COM04-EV1	C200HW-COM05-EV1	C200HW-COM06-EV1
Current consumption at 5 V	0.03 A	0.1 A	0.2 A	0.1 A	0.1 A	0.2 A
External dimensions	42.5 × 134 × 98 mm (W × H × D)					
Weight	100 g max.	100 g max.	105 g max.	110 g max.	110 g max.	115 g max.
Standard accessories	---	Plug: XM2A-0901 (OMRON) × 1 Hood: XM2S-0911 (OMRON) × 1			Plug: XM2A-0901 (OMRON) × 2 Hood: XM2S-0911 (OMRON) × 2	

1-1-9 Basic Specifications

The basic specifications will be determined by the basic specifications of the C200HX/HG/HE(-Z) PC used.

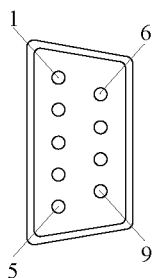
1-1-10 Communications Specifications

The following tables provide the communications specifications of RS-232C and RS-422A/485 ports.

RS-232C Port

Item	Specification
Communications method	Half duplex
Synchronization	Start-stop
Baud rate	1,200/2,400/4,800/9,600/19,200 bps
Transmission method	Point-to-point
Transmission distance	15 m max.
Interface	Complies with EIA RS-232C

Connector Pin Assignment



Pin No.	Signal name	Abbreviation	Signal direction
1	Safety ground	FG	–
2	Send data	SD	Output
3	Receive data	RD	Input
4	Send request	RS	Output
5	Send enabled	CS	Input
6	Power supply	5V	–
7	Dataset ready	DR	Input
8	Data terminal ready	ER	Output
9	Signal ground	SG	–
Shell	Safety ground	FG	–

Connectors

Plug: XM2A-0901 (OMRON) or equivalent
Hood: XM2S-0911 (OMRON) or equivalent

Note One plug and one hood are provided.

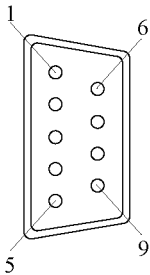
Recommended Cable

AWG28 × 5P IFVV-SB (manufactured by FUJIKURA DENSEN)
CO-MAVV-SB 5P × AWG28 (manufactured by HITACHI DENSEN)
Line length: 15 m max.

RS-422A/485 Port

Item	Specification
Communications method	Half duplex
Synchronization	Start-stop
Baud rate	1,200/2,400/4,800/9,600/19,200 bps
Transmission method	Point-to-multipoint
Transmission distance	500 m max.
Interface	Complies with EIA RS-422A/485

Connector Pin Assignment



Pin No.	Signal name	Abbreviation	Signal direction
1	Send data -	SDA	Output
2	Send data +	SDB	Output
3	Unused	NC	-
4	Unused	NC	-
5	Unused	NC	-
6	Receive data -	RDA	Input
7	Unused	NC	-
8	Receive data +	RDB	Input
9	Unused	NC	-
Shell	Safety ground	FG	-

Note When the 2-wire communications is set, use 1 and 2, or 6 and 8.

Connectors

Plug: XM2A-0901 (OMRON) or equivalent
 Hood: XM2S-0911 (OMRON) or equivalent

Note One plug and one hood are provided.

Recommended Cable

AWG28 × 5P IFVV-SB (manufactured by FUJIKURA DENSEN)
 CO-MAVV-SB 5P × AWG28 (manufactured by HITACHI DENSEN)
 Line length: 500 m max.

1-1-11 Communications Modes and Transmission Paths

The following table shows the transmission paths that can be used for each of the communications modes.

Communications mode	RS-232C	4-wire 1:1	4-wire 1:N	2-wire 1:1	2-wire 1:N
1:N Host Link	YES	YES	YES	NO	NO
Non-procedure	YES	YES	YES	NO	NO
1:1 link	YES	YES	NO	NO	NO
1:1 NT Link	YES	YES	NO	NO	NO
1:N NT Link	NO	YES	YES	YES	YES
Protocol macros	YES	YES	YES	YES	YES