

Mountable Racks

Model		NJ system		CJ1 system		CP1H system	NSJ system *1	
		CPU Rack	Expansion Rack	CPU Rack	Expansion Backplane	CP1H PLC	NSJ Controller	Expansion Backplane
CJ1W-CLK23	Unit version 2.0	Not supported		8 Units (per CPU Unit)		2 Units *2	Not supported *3	8 Units *4
CJ1W-CLK21-V1 *1	Unit version 1.2							

*1. Product no longer available to order.

*2. A CP1W-EXT01 CJ Unit Adaptor is required.

*3. One NSJW-CLK21-V1 can be mounted to the NSJ Controller.

*4. If an Expansion Rack is used, the NSJW-CLK21-V1 cannot be mounted to the NSJ Controller.

Communications Specifications

Items	Specifications
Model	CJ1W-CLK23 3G8F7-CLK23-E CJ1W-CLK21-V1 *1 3G8F7-CLK21-EV1 *1
Type	Wired (shielded twisted-pair cable)
Communications method	N:N token-bus method
Code	Manchester code
Modulation	Baseband code
Synchronization	Flag synchronization (conforms to HDLC frames)
Transmission path format	Multidrop method (bus type)
Transmission speed	The following are the maximum transmission distances depending on the transmission speed.
Maximum transmission distance	2 Mbits/s: 500 m 1 Mbits/s: 800 m 500 kbits/s: 1 km
Maximum distance between nodes	Not specified. (Maximum transmission distance must be satisfied for the entire system.)
Medium	Specified shielded twist-pair cable Two signal wires, one shield
Node connection method	PLC: Connection to terminal block Computer: Connection using special (supplied) connector
Maximum number of nodes	32 or 62 nodes *2 *3
Applicable Programming Devices	CX-Integrator in CX-One, CX-Net in CX-Programmer *3, and Programming Console
Communications functions	Data links and message service
Number of data link words	Send words per node: 4,000 words max. (CJ1W-CLK□3), 1,000 words max. (All other Units) Number of send/receive words per node: 12,000 words max. (Pre-Ver. 1.2) 20,000 words max. (unit Ver. 1.2 or later) Total number of send words per network: 62,000 words max.
Data link areas	PLC: Bit areas (CIO Area, Work Area, Link Area *4), Data Memory (DM), Extended DM Area (EM) Computer: FinsGateway event memory
Message length	2,012 bytes max. (including the header)
RAS functions	<ul style="list-style-type: none"> • Polling node backup function • Self-diagnosis function (hardware checking at startup) • Echoback test and broadcast test (using the FINS command) • Watchdog timer • Error log function
Error control	Manchester code check CRC check (CCITT $X^{16}+X^{12}+X^5+1$)

*1. Discontinuation models in July 2012.

*2. With wired models, the maximum number of nodes is 32 if Repeater Units are not used. A Repeater Unit is required when building a network with more than 32 nodes. If a Repeater Unit is used, be sure to use only the following Controller Link Units or Boards and set the Wired Network 62 Node Enable Bit in the DM Parameter Area software switches at all nodes.

CS1W-CLK23/CLK21-V1
CJ1W-CLK23/CLK21-V1
3G8F7-CLK23-E/CLK21-EV1

*3. CX-Net in CX-Programmer version 3.1 or earlier can be used only in a system with a maximum of 32 nodes (node address 1 to 32). If a system is to be used with a maximum of 62 nodes (node addresses 1 to 62), use CX-Net in CX-Programmer version 3.2 or higher or the CX-Integrator.

*4. CJ-series PLCs do not have a Link Area, but LR000 to LR199 are automatically converted CIO 1000 to CIO 1199.