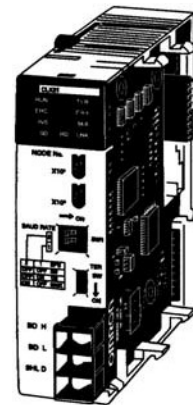


Communications Units

Controller Link Unit CQM1H-CLK21

The Controller Link is an FA network that can send and receive large data packets flexibly and easily among the OMRON CQM1H-series, C200HX/HG/HE, and CS-series PLCs.

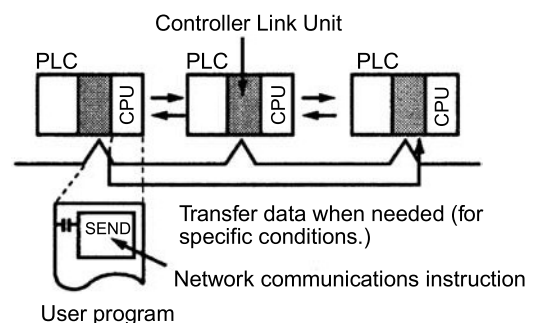
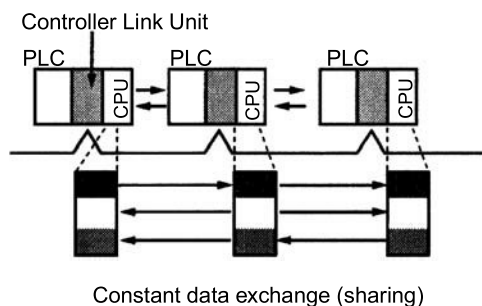
The Controller Link supports data links that enable data sharing and a message service that enables sending and receiving data when required. Data link areas can be freely set to create a flexible data link system and effectively use data areas.



- High-capacity, flexible, and efficient data links
- Message service can transfer large quantities of data.
- Simple twisted-pair wiring
- Easily connects different PLC models and computers.
- Flexible inter-network connections
- Robust error-handling functions

■ Data Links

■ Message Service



Unit Specifications

Item	Specifications
Name	Controller Link Unit
Model number	CQM1H-CLK21
Applicable CPU Units	CQM1H-CPU51/CPU61
Unit classification	Communications Unit
Connection location and number of Units	One Unit only. The Unit must be connected between the Power Supply Unit and the CPU Unit.
Current consumption	270 mA
Dimensions	32 × 110 × 107 mm (W × H × D) (without terminals)
Weight	170 g max.

Communications Specifications

Item	Specifications
Communications method	N:N token bus
Code	Manchester code
Modulation	Baseband code
Synchronization	Flag synchronization (conforms to HDLC frames)
Transmission path form	Multi-drop bus
Baud rate and maximum transmission distance	The maximum transmission distance varies with the baud rate as follows: 2 Mbps: 500 m 1 Mbps: 800 m 500 Kbps: 1 km
Media	Specified shielded twisted-pair cable Number of signal lines: 2, shield line: 1
Maximum number of nodes	32 nodes
Communications functions	Data links and message service
Number of data link words	Transmission area per node: 1,000 words max. Data link area in one CQM1H-series PLC (send/receive): 8,000 words max.
Data link areas	Bit areas (IR, AR, LR, CIO), data memory (DM), and extended data memory (EM)
Message length	2,012 bytes max. (including the header)
RAS functions	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 $X^{16} + X^{12} + X^5 + 1$)