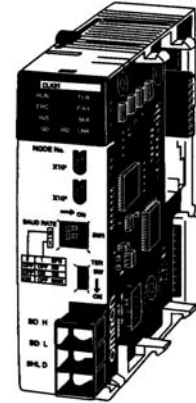


Communications Units

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.

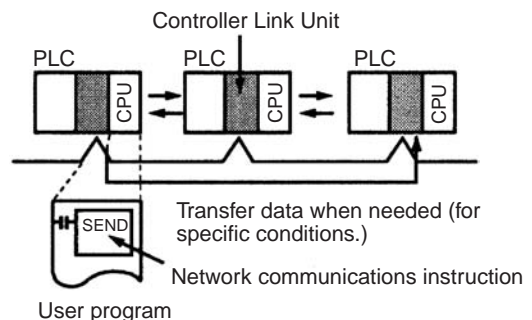
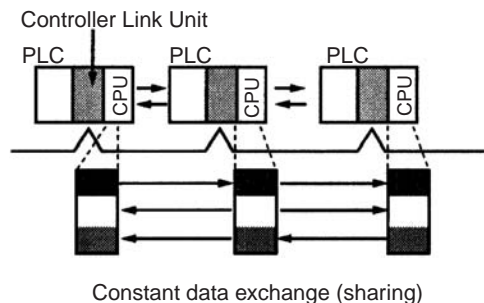
The Controller Link supports data links that enable data sharing and a message service that enables sending and receiving data when required. Data link areas can be freely set to create a flexible data link system and effectively use data areas.



- 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 $X^{16} + X^{12} + X^5 + 1$) |