Reduce the Work Required to Create Data Communications Protocols for General-purpose Devices

- Application software to create protocols (communications sequences) between SYSMAC CS/CJ/CP/NSJ-series *1 or C200HX/HG/HE Serial Communications Boards/Units and general-purpose external devices.

Note: The CX-Protocol is included in the CX-One FA Integrated Tool Package.

*1. NSJ-series is no longer available to order.

Feature

- Create protocols for general-purpose devices connected to PLC Boards or Units via RS-232C or RS-485A/422.
- Transfer the protocols to PLC Boards and Units.
- Repeat steps or branch/end steps according to response contents.

Ordering Information

Product name	Specifications			Model
		Number of Licenses	Media	
FA Integrated Tool Package CX-One Ver.4.□	The CX-One is a package that integrates the Support Software for OMRON PLCs and components. CX-One Ver.4.□ includes CX-Protocol Ver.1.□.	1 license ✳	DVD	**CXONE-AL01D-V4**

Note: For details, refer to the CX-One Catalog (Cat. No. R134), visit your local OMRON website.
✳ Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

Product Configuration

Setup disk   : (DVD)   DVD 1 piece in the case
Guidance   : A4 size, English / Japanese
Product Registration Guide, Japanese
User license agreement / User registration card, English / Japanese

Main Function

Category	Function
Create/edit protocol	Creates/Edits protocol data
Transfer protocol	Transfer protocol data
	Compare protocol data
Communication port	Edits communication port setting data for serial communication unit/board
	Transfer/verify communication port setting data for serial communication unit/board
Trace	Displays data that was sent or received on a communications port.
Display Error	Displays current errors in the PLC or displays the error log.
Print	Prints protocol data/trace data
Monitor I/O memory	Display I/O memory
	Edit I/O memory
	Monitor I/O memory
	Transfer/verify I/O memory data
Supported communications control methods	Transmission mode: Half-duplex or full-duplex
	Synchronization mode: Start-stop synchronization
	Transmission control method: Contention mode (point-to-point connections) Polling selecting mode (Point-to-multi-point connections) Modem control mode
	Flow control mode: Software flow: Xon/Xoff flow control Hardware flow: RTS/CTS flow control Delimiter control
	Transmission error control modes: LRC, LRC2,✳1 CRC-CCITT, CRC-16✳1, ✳2, SUM,✳1, ✳2 SUM1,✳1 SUM2✳1, ✳2
	Message format: Header + Address + Length + Data + Error Check Code + Terminator, Header + Address + Length + Data + Terminator + Error Check Code,✳1, ✳2 etc.

✳**1.** Only CS/CJ series are supported.
✳**2.** Only C200HW-COM□□ is supported.

System Requirements

The system requirements are the same as those for the CX-One. (The CX-Protocol is included in the CX-One.)
For details, refer to the FA Integrated Tool Package CX-One Datasheet.

Applicable Units

The CX-Protocol can be used for Serial Communications Units that support protocol macros.

Applicable Models

PLC

Series	Unit
CS	CS1H-CPU63/64/65/66/67 (-V1) CS1G-CPU42/43/44/45 (-V1) CS1H-CPU63H/64H/65H/66H/67H CS1G-CPU42H/43H/44H/45H CS1D-CPU65H/67H/67HA/68HA CS1D-CPU42S/44S/65S/67S/44SA/67SA
CJ	CJ1M-CPU11/12/13/21/22/23 CJ1G-CPU44/45 CJ1H-CPU65H/66H/67H/64H-R/65H-R/66H-R/67H-R CJ1G-CPU42H/43H/44H/45H CJ2H-CPU64-EIP/65-EIP/66-EIP/67-EIP/68-EIP CJ2H-CPU64/65/66/67/68 CJ2M-CPU11/12/13/14/15/31/32/33/34/35
CP	CP1H-XA40DR-A/XA40DT-D/XA40DT1-D /X40DR-A/X40DT-D/X40DT1-D /Y20DT-D
NSJ	NSJ5-□-G5D NSJ8-□-G5D NSJ10-□-G5D NSJ12-□-G5D NSJ5-□-M3D NSJ8-□-M3D
SYSMACα	C200HX-CPU34/44/54/64 C200HG-CPU33/43/53/63 C200HE-CPU32/42 C200HX-CPU34-Z/CPU44-Z/CPU54-Z/CPU64-Z/CPU65-Z/CPU85-Z C200HG-CPU33-Z/CPU43-Z/CPU53-Z/CPU63-Z C200HE-CPU32-Z/CPU42-Z
CQM1H	CQM1H-CPU11/21/51/61

Communication Boards/Units

Series	Serial Communication I/O Unit
CS	CS1W-SCU21(-V1)/SCU31-V1/SCB21(-V1)/SCB41(-V1)
CJ	CJ1W-SCU21(-V1)/SCU31-V1/SCU41(-V1)
SYSMACα	C200HW-COM04(-V1)/COM05(-V1)/COM06(-V1)
CQM1H	CQM1H-SCB41

Note: Including models no longer available to order.

Related Manuals

Cat.No.	Model	Manual name	Contents
W344	CXONE-AL□□D-V4	CX-Protocol Operation Manual	Describes the use of the CX-Protocol to create protocol macros as communications sequences to communicate with external devices. Refer to this manual when using the CX-Protocol to create protocol macros for user serial communications or when customizing standard system protocol macros.
W469	CXONE-AL□□D-V4	CX-One Set up Manual	Installation and overview of CX-One FA Integrated Tool Package

Terms and Conditions Agreement