# **CX-Protocol Ver.2**

CSM CX-Protocol DS F 7 9

## 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**

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

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**

: (DVD) DVD 1 piece in the case Setup disk 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 data		
Transfer protocol	Compare protocol data		
O	Edits communication port setting data for serial communication unit/board		
Communication port	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		
	Display I/O memory		
Manitan I/O manana	Edit I/O memory		
Monitor I/O memory	Monitor I/O memory		
	Transfer/verify I/O memory data		
	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		
Supported communications control methods	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.		

**<sup>\*1.</sup>** Only CS/CJ series are supported.

**<sup>\*2.</sup>** 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/667H 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		
СР	CP1H-XA40DR-A/XA40DT-D/XA40DT1-D /X40DR-A/X40DT-D/X40DT1-D /Y20DT-D		
NSJ	NSJ5-□-G5D NSJ8-□-G5D NSJ10-□-G5D NSJ12-□-G5D NSJ12-□-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)	
$sysmac\alpha$	MACα C200HW-COM04(-V1)/COM05(-V1)/COM06(-V1)	
CQM1H	QM1H 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

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