

■ NSJ Series

● Specifications

Model	Controller Section	Display Section			
		Display device	Frame color	Effective display area	Resolution
NSJ5-TQ00-G5D	I/O capacity: 1,280 points Program capacity: 60K steps Data memory capacity: 128K words (DM: 32K words, EM: 32K words x 3 banks) Function blocks supported (algorithms: ladder diagram or ST language)	High-definition TFT color LCD	Ivory	117.2 x 88.4 (W x H) mm (5.7-inch model)	320 x 240 (QVGA)
NSJ5-TQ00B-G5D			Black		
NSJ5-TQ01-G5D			Ivory		
NSJ5-TQ01B-G5D			Black		
NSJ5-SQ00-G5D			Ivory		
NSJ5-SQ00B-G5D			Black		
NSJ8-TV00-G5D		Color STN LCD	Ivory	162.2 x 121.7 (W x H) (8.4-inch model)	640 x 480 (VGA)
NSJ8-TV00B-G5D			Black		
NSJ8-TV01-G5D			Ivory		
NSJ8-TV01B-G5D			Black		
NSJ10-TV00B-G5D			Ivory		
NSJ10-TV01-G5D			Black		
NSJ10-TV01B-G5D	High-definition TFT color LCD	Ivory	215.2 x 162.4 (W x H) mm (10.4-inch model)	800 x 600 (SVGA)	
NSJ12-TS00-G5D		Black			
NSJ12-TS00B-G5D		Ivory			
NSJ12-TS01-G5D		Black			
NSJ12-TS01B-G5D		Ivory			
NSJ12-TS01B-G5D		Black			

● Other specifications

Model	Built-in port				Display Section				
	Slave USB port	RS-232C port	DeviceNet port	Ethernet port	Printer USB port	Display color	View angle	Language	Standard screen data capacity
NSJ5-TQ00-G5D	One port	Three ports Display Section: A and B Controller Section: C	One port	None	None	256 colors (32,768 colors for BMP/JPEG images)	Left/right ±70°, Top 75°, Bottom 50°	Japanese and English	20 MB
NSJ5-TQ00B-G5D									
NSJ5-TQ01-G5D									
NSJ5-TQ01B-G5D									
NSJ5-SQ00-G5D									
NSJ5-SQ00B-G5D									
NSJ5-SQ01-G5D									
NSJ5-SQ01B-G5D									
NSJ8-TV00-G5D									
NSJ8-TV00B-G5D									
NSJ8-TV01-G5D									
NSJ8-TV01B-G5D									
NSJ10-TV00B-G5D	One port	None	None	None	256 colors (32,768 colors for BMP/JPEG images)	Left/right ±60°, Top 35°, Bottom 65°	Japanese and English	60 MB	
NSJ10-TV01-G5D									
NSJ10-TV01B-G5D									
NSJ12-TS00-G5D									
NSJ12-TS00B-G5D									
NSJ12-TS01-G5D									
NSJ12-TS01B-G5D									

Warranty and Limitations of Liability

WARRANTY
OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR PARTICULAR PURPOSE OF THE PRODUCTS. ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE. OMRON DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED.

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This catalog mainly provides information that is necessary for selecting suitable models, and does not contain precautions for correct use. Always read the precautions and other required information provided in product operation manuals before using the product.

- The application examples provided in this catalog are for reference only. Check functions and safety of the equipment before use.
- Never use the products for any application requiring special safety requirements, such as nuclear energy control systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, or other application involving serious risk to life or property, without ensuring that the system as a whole has been designed to address the risks, and that the OMRON products are properly rated and installed for the intended use within the overall equipment or system.

● Options and Expansion Units

Name	Model	Specifications
Memory Card (for the Controller Section and Display Section)	HMC-EF372	Flash Memory, 30 MB
	HMC-EF672	Flash Memory, 64 MB
	HMC-AP001	Memory Card Adaptor
Expansion Unit	NSJ Controller Link Unit	NSJW-CLK21-V1 Addition of Controller Link port. Same as the Controller Link Unit for CJ-series PLCs (CJ1W-CLK21-V1).
	NSJ Ethernet Unit	NSJW-ETN21 Addition of Ethernet port. Same as the Ethernet Unit for CJ-series PLCs (CJ1W-ETN21).
NSJ I/O Control Unit	NSJW-IC101 Addition of CJ-series Expansion Racks. Same as CJ-series I/O Control Unit (CJ1W-IC101).	

■ CX-One

● Standard Models

Name	Specifications	Model	
CX-One FA Integrated Tool Package Ver. 1.1	The CX-One is an integrated tool pack that provides programming and monitoring software for OMRON PLCs and components. The CX-One runs on any of the following operating systems: Windows 98 SE, Me, NT 4.0 (Service Pack 6a), 2000 (Service Pack 3 or higher), or XP. CX-Designer version 1.1 is included in the CX-One. Refer to the CX-One catalog (R134) for details.	1 license	CXONE-AL01C-E
	3 licenses	CXONE-AL03C-E	
	10 licenses	CXONE-AL10C-E	
	30 licenses	CXONE-AL30C-E	
	50 licenses	CXONE-AL50C-E	

Site licenses are also available for users that need to use the CX-One on many computers. Ask your OMRON representative for details.

● CX-One Operating Environment

Compatible OS	Windows 98 SE, Me, NT 4.0 (Service Pack 6a), 2000 (Service Pack 3 or higher), or XP (See note 1.)
Recommended CPU	Pentium II 333 MHz or faster processor (Pentium III 1 GHz or faster recommended.)
Recommended memory	256 Mbytes min. (See note 2.)
Hard disk free space	Approx. 1.8 GB or more available space is required to install the complete CX-One package.
CD-ROM drive	Required for installation
Display	SVGA (800 x 600) or better high-resolution display with 256 colors min.

Note 1: CX-One OS precaution
The CX-One will not run on Microsoft Windows 95 or any other OS not listed above. If such an OS is being used on the client computer, the OS must be upgraded before installing the CX-One. System requirements and hard disk space may vary with the system environment.

Note 2: The amount of memory required varies the Support Software applications used in CX-One. Refer to use documentation for Individual Support Software for details.

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Note: Do not use this document to operate the Unit.

OMRON Corporation

Control Devices Division H.O.
Shioikoji Horikawa, Shimogyo-ku,
Kyoto, 600-8530 Japan
Tel: (81)75-344-7109
Fax: (81)75-344-7149

Regional Headquarters

OMRON EUROPE B.V.
Wegalaan 67-69, NL-2132 JD Hoofddorp
The Netherlands
Tel: (31)2356-81-300/
Fax: (31)2356-81-388

OMRON ELECTRONICS LLC

1 East Commerce Drive, Schaumburg,
IL 60173 U.S.A.
Tel: (1)847-843-7900/Fax: (1)847-843-8568

OMRON ASIA PACIFIC PTE. LTD.

83 Clemenceau Avenue,
#11-01, UE Square,
Singapore 239920
Tel: (65)6835-3011/Fax: (65)6835-2711

OMRON (CHINA) CO., LTD.

Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120 China
Tel: (86)21-5037-2222/Fax: (86)21-5037-2200

Authorized Distributor:

Note: Specifications subject to change without notice.

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New!

OMRON

Programmable Controller
SYSMAC One
NSJ Series

HMI Integrated into a Controller.
The New SYSMAC One One-package Controller for High-precision Control



realizing

Full Lineup of Models in the 5.7" to 12" Class and Expansion Units

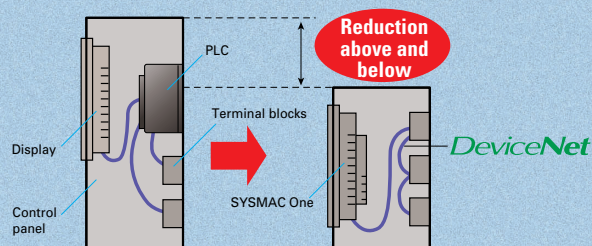


Controller Shapes and Functions Designed to Respond to Customer Requirements for More Compact Machines

The New SYSMAC One One-package Controller NSJ Series

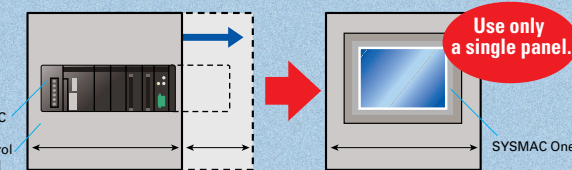
One-package Construction Saves Space and Makes Life Easy

1 Save Space



Issue The PLC is located behind the HMI and the terminal blocks are placed underneath, so the layout is extended vertically.

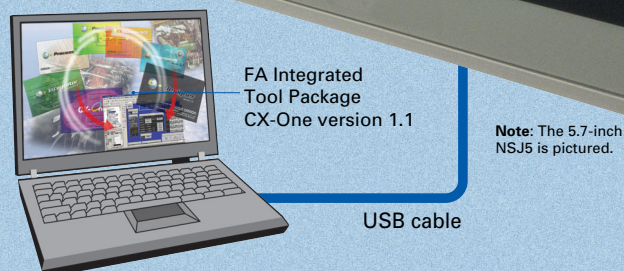
Solution Place the terminal blocks behind the HMI!



Issue A change in the PLC configuration extends the arrangement horizontally, requiring redesigning of the panel.

Solution No need to redesign the panel. The width left and right remains unchanged. Panel redesigning is not required!

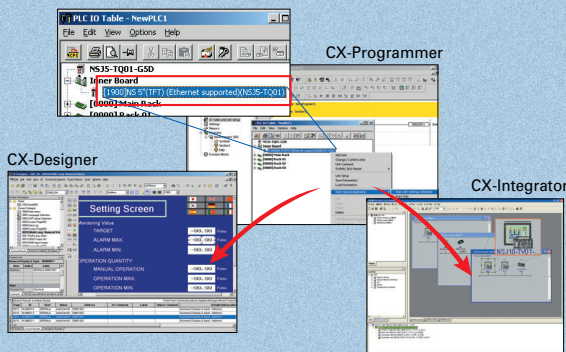
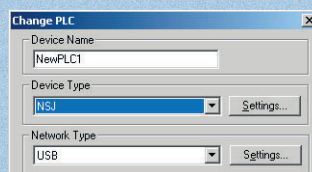
Numerous customers have requested even smaller control panels. We recognized, however, that there are limits when combining separate HMI and controllers. Therefore, we redesigned the shape of the Controller. With its all-in-one design, the SYSMAC One NSJ Series saves space as well as provides a variety of advantages.



2 Integrated Software

Best match with FA Integrated Tool Package CX-One

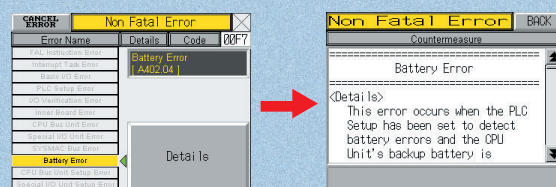
By using FA Integrated Tool Package CX-One, NS/NJ-series design tool (CX-Designer) and the network setting tool (CX-Integrator) can be called up from ladder programming tool (CX-Programmer).



Easy and Fast Data Transfer Using an Off-the-shelf USB Cable.

Ladder program from CX-Programmer and screen data from CX-Designer can be quickly transferred. And both the Controller Section and Display Section can be online at the same time. Naturally, no cable connection or difficult communications settings are required. The connection starts simply by turning ON the power supply.

3 Easy Diagnosis



Built-in Troubleshooter for the Controller CPU and DeviceNet

If there is a failure in the Controller CPU or a DeviceNet master or slave, information on the failure and the possible countermeasure is displayed. The user can quickly apply remedies for errors when they occur without referring to the manual.

Memory Backup Using a Memory Card
In addition to display screens, Controller Section programming can also be backed up by following on-screen instructions.



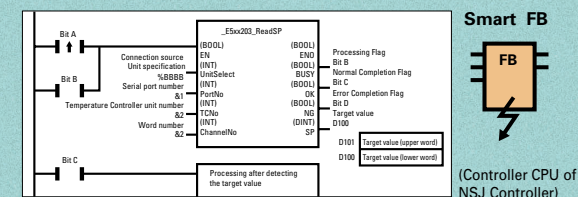
Precise Control Even from an Integrated Product

1 Equivalent to the SYSMAC CJ-series PLCs

The SYSMAC One NSJ Series is a series of controllers that include a CPU Unit equivalent to that of the SYSMAC CJ-series CJ1G-CPU45H. The Display Section also includes a CPU for display. The control programming therefore remains completely unaffected even if there is a failure in the Display Section due to the load on it.

2 Continue Using Your Assets and Support Tool

Continue to use all the screen data for NS-series HMIs and ladder programs for CS/CJ-series PLCs. The CX-Designer for NS-series HMI and the CX-Programmer for ladder programming can be used as the Support Software (see note), so customers who have been using these software packages have no need to learn new software. Function blocks and the Smart Active Part libraries can of course also be used.



Smart Active Parts



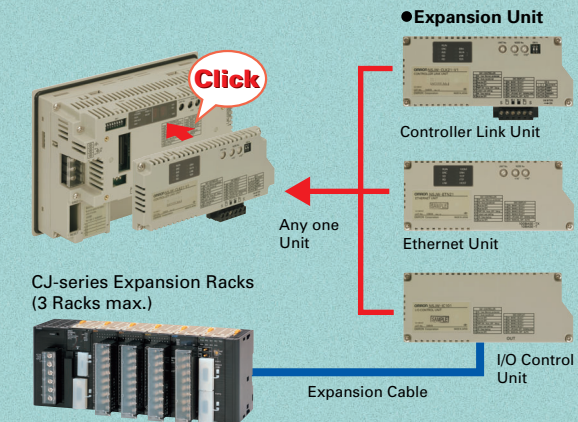
The Smart Active Parts are accessed by selecting Tools → Library from the menu bar of the CX-Designer.

(Display Section of NSJ Controller)

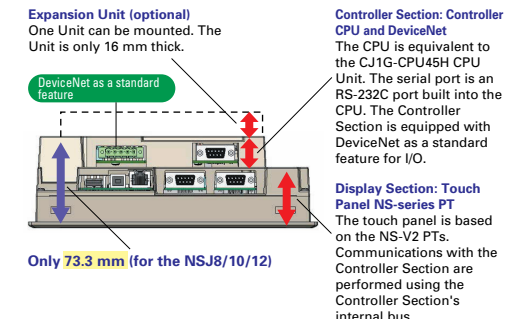
Note: SYSMAC One NSJ-series NSJ Controllers are supported by CX-One version 1.1 or higher.

3 Expandable System

The system can be expanded with one Expansion Unit (Controller Link Unit, Ethernet Unit or I/O Control Unit). By using an I/O Control Unit, any CJ-series Unit until now can be used.

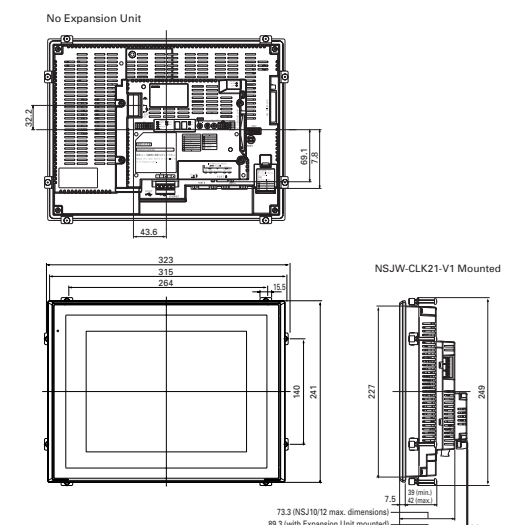


Slim NSJ-series Controller Construction

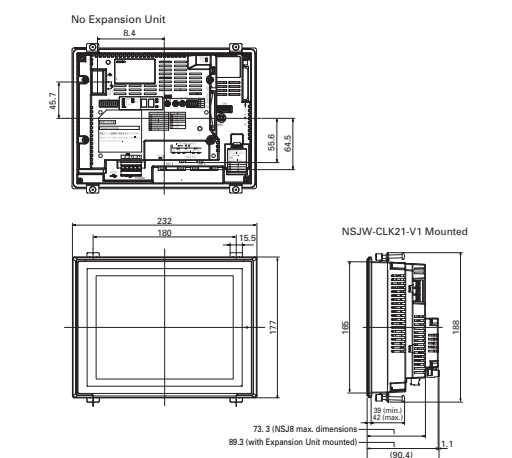


Dimensions (Unit: mm)

NSJ12-TS0 (B)-G5D/NSJ10-TV0 (B)-G5D



NSJ8-TV0 (B)-G5D



NSJ5-SQ00 (B)-G5D/NSJ5-TQ00 (B)-G5D

