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OMRON CJ1W-IC101 I-O Interface Unit Instruction Manual

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Contents

## Expand CJ/NJ-series with These Units

- To expand a CJ/NJ-series Controller, connect an I/O Control Unit to the CPU Rack, and I/O Interface Unit to the Expansion Rack, and connect the two Units with I/O Expansion Cable.

Features

- Rack-mountable Units enable expanding Controller capacity even when space is limited.
- Easy-to-use connectors enable quick expansion without any settings.

System Configuration

The I/O Control Unit is connected directly to the CPU Unit. If it is not immediately to the right of the CPU Unit, correct operation may not be possible. The I/O Interface Unit is connected directly to the Power Supply Unit. If it is not immediately to the right of the Power Supply Unit, correct operation may not be possible.
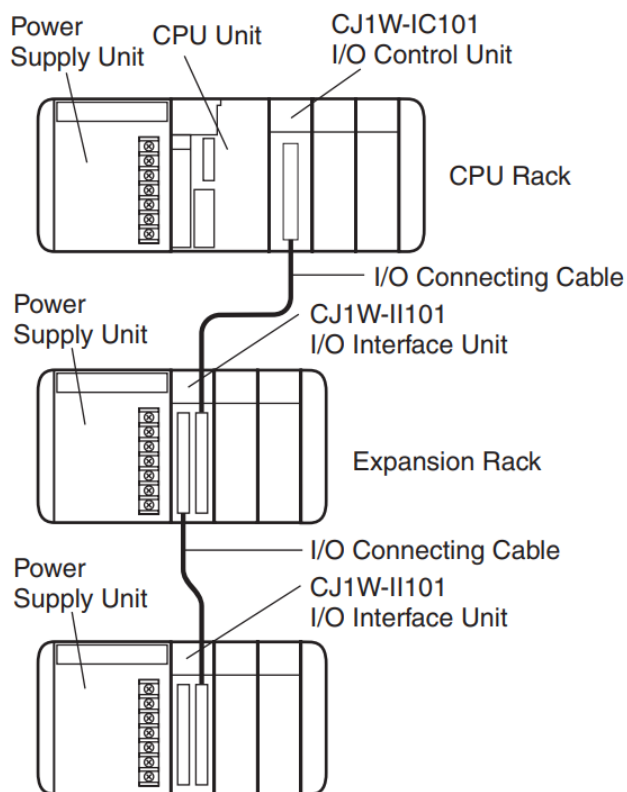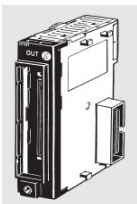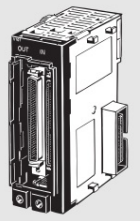
Ordering Information

International Standards

- The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards

I/O Control Unit (Mounted on CPU Rack when Connecting Expansion Racks)

Product name	Specifications	Current consumption (A)		Model	Standards
CJ-series I/O Control Uni	Mount one I/O Control Unit on the CPU Rack when connecting one or more Expansion Racks. Connecting Cable: CS1W-CN@@3 Expansion Connecting Cable Connected Unit: CJ1W-II101 I/O Interface Unit Mount to the right of the CPU Unit.	5 V	24 V		UC1, N, L, CE
		0.02	–		

Product Name	Specifications	Current consumption (A)		Model	Standards
CJ-series I/O Interface Unit	One I/O Interface Unit is required on each Expansion Rack. Connecting Cable: CS1W-CN@@3 Expansion Connecting Cable Mount to the right of the Power Supply Unit.	5 V	24 V	CJ1W-II101	UC1, N, L, CE
		0.13	–		

Note: Mounting the I/O Interface Unit in any other location may cause faulty operation.

Accessories

CJ1W-IC101 I/O Control Unit
There is no accessory for the I/O Control Unit Unit.

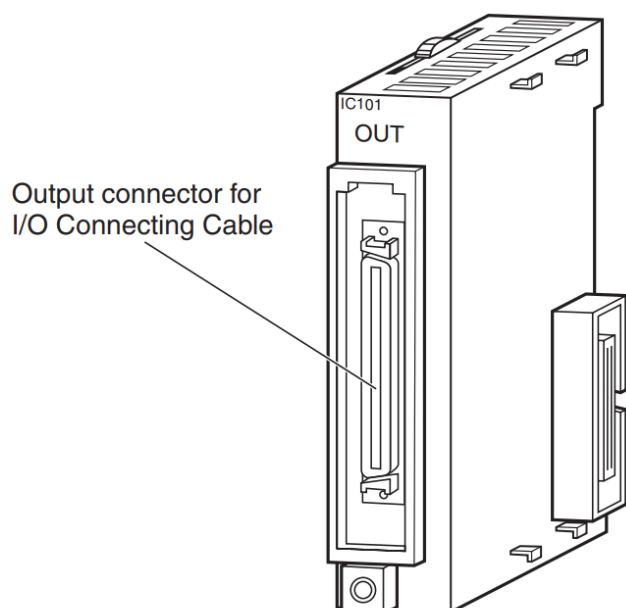### CJ1W-II101 I/O Interface Unit
The following accessories come with I/O Interface Unit:
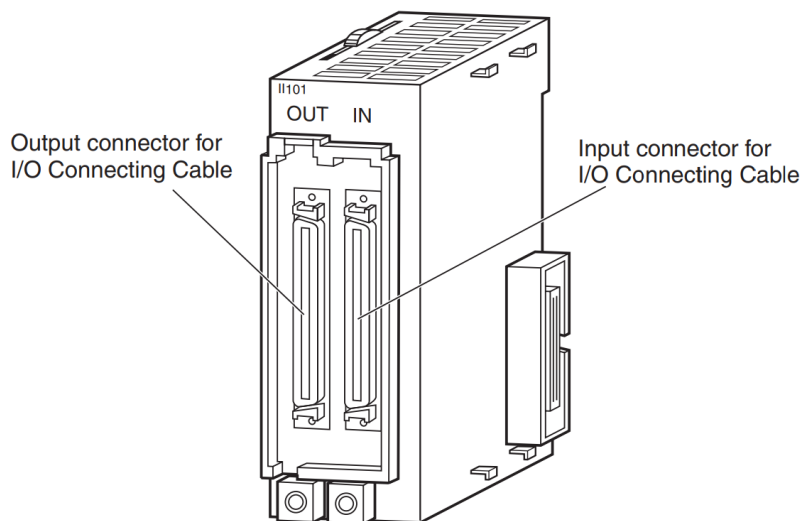
Item	Specification
End Cover	CJ1W-TER01 (necessary to be mouned at the right end of CPU Rack)
End Plate	PFP-M (2 pcs)

External Interface

I/O Control Unit CJ1W-IC101

Output connector for I/O Connecting Cable

I/O Interface Unit CJ1W-II101

Output connector for
I/O Connecting Cable

Input connector for
I/O Connecting Cable

Connecting Expansion Racks

CS/CJ-series I/O Connecting Cables are used to connect the CPU Rack and Expansion Racks.

CS/CJ-series I/O Connecting Cables
The CS/CJ-series I/O Connecting Cables have connectors with a simple lock mechanism are used to connect the CPU Rack to an Expansion Rack or to connect two Expansion Racks.

CS/CJ-series I/O Connecting Cables

Model number	Cable length
CS1W-CN313	0.3 m
CS1W-CN713	0.7 m
CS1W-CN223	2 m
CS1W-CN323	3 m
CS1W-CN523	5 m
CS1W-CN133	10 m
CS1W-CN133-B2	12 m

- Install the Racks and select I/O Connecting Cables so that the total length of all I/O Connecting Cables does not exceed 12 m.
- The following diagram shows where each I/O Connecting Cable must be connected on each Rack. The Rack will not operate if the cables aren't connected properly. (The "up" direction is towards the CPU Unit and "down" is away from the CPU Unit.)
  CPU Rack

Power Supply Unit · CPU Unit

Down

Expansion Rack

Power Supply Unit · Up · I/O Interface Unit

Down
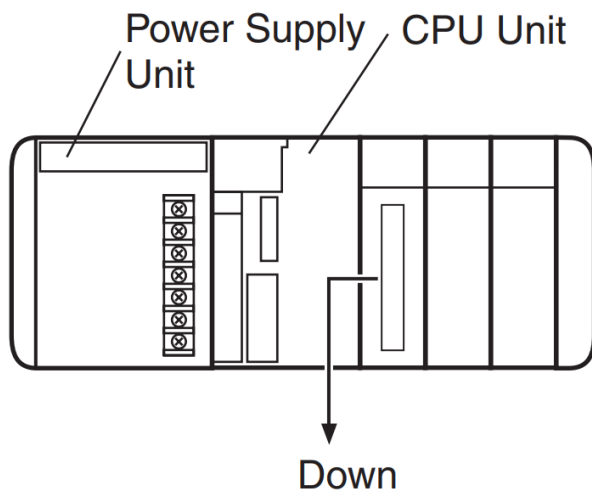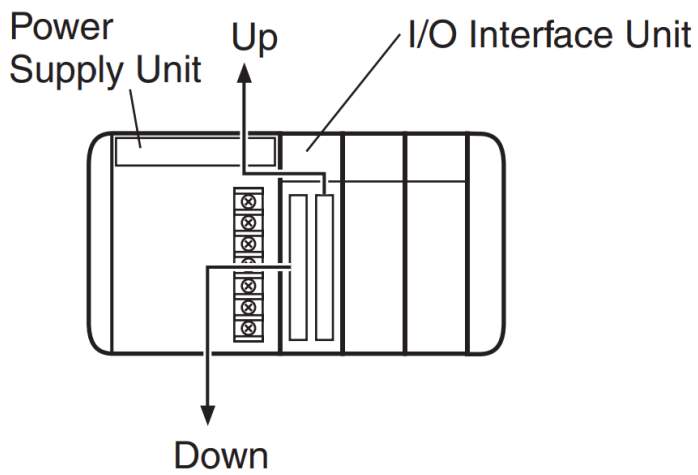
Usage Precautions

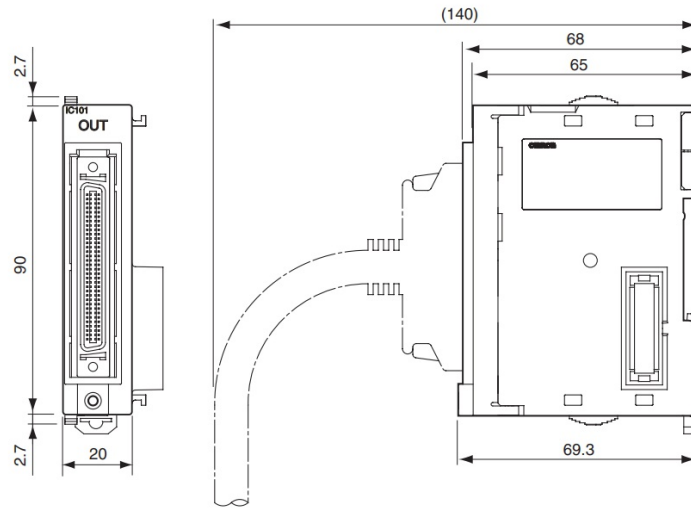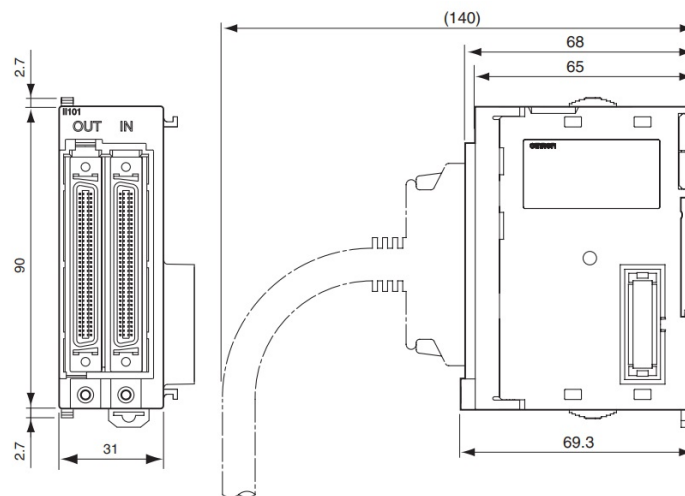- CJ1W-IC101 I/O Control Unit is connected directly to the CPU Unit. CJ1W-II101 I/O Interface Unit is connected directly to the Power Supply Unit.
- The number of Expansion Racks that can be connected depends on the CPU Unit. Refer to the SYSMAC NJ-series CPU Unit Hardware User's Manual (Cat.No.W500), CJ Series Programmable Controllers Operation Manual (Cat. No. W393) or CJ-series CJ2 CPU Unit Hardware User's Manual (Cat. No. W472) for details.
- Use a CS-Series I/O Connecting Cable (CS1W-CN@@3) to connect an Expansion Rack.
- Install the Racks and select I/O Connecting Cables so that the total length of all I/O Connecting Cables does not exceed 12m.
- When using an I/O Connecting Cable with a locking connector, be sure that the connector is firmly locked in place before using it.
- Attached the enclosed cover to the I/O Connecting Cable connector on the I/O Interface Unit when it is not being used to protect it from dust.

Dimensions

I/O Control Unit CJ1W-IC101

I/O Interface Unit CJ1W-II101

Related Manuals

Name	Cat. No.	Contents
SYSMAC CJ Series CJ1H-CPU@@H-R, CJ1G/H-CPU@@H, CJ1G-CPU@@P, CJ1G-CPU@@, CJ1M-CPU@@ Programmable Controllers Operation Manual	W393	Provides an outlines of and describes the design, installation, maintenance, and other basic operations for the CJ-series PLCs.
CJ-series CJ2 CPU Unit Hardware User's Manual CJ2H-CPU6@-EIP CJ2H-CPU6@	W472	Describes the following for CJ2 CPU Units: • Overview and features • Basic system configuration • Part nomenclature and functions • Mounting and setting procedure • Remedies for errors • Also refer to the Software User's Manual (W473
NJ-series CPU Unit Hardware User's Manual NJ501–@@@@	W500	n introduction to the entire NJ-series system is provided along with the following information on a Controller built with an NJ501 CPU Unit. • Features and system configuration • Introduction • Part names and functions • General specifications • Installation and wiring • Maintenance and inspection Use this manual together with the NJ-series CPU Unit Software User's Manual (Cat. No.W501).

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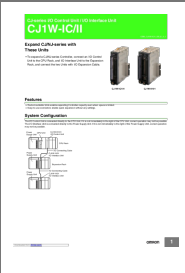
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Documents / Resources

OMRON CJ1W-IC101 I-O Interface Unit [pdf] Instruction Manual
CJ1W-IC101, CJ1W-II101, CJ1W-IC101 I-O Interface Unit, I-O Interface Unit, Interface Unit

References

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- ▦ **OMRON Industrial Automation**