

NEW

OMRON

CS/CJ/CP Series with a proven track record

# New Functions Added to CS/CJ/CP Series

Increased security

## CS/CJ/CP CPU Units

**Version Upgraded** in October 2015

More secure 16-character password protection for user programs



## Position Control Unit with EtherCAT interface CJ1W-NC□82

**Version Upgraded** in October 2015

Electronic cam/helical interpolation control to increase the added value of machines

Electronic cam control



CJ1W-NC□82

Improved to meet your needs!



Enhanced lineup and functionality for more flexibility



**EtherNet/IP Unit**  
CJ1W-EIP21

**Version Upgraded**  
in December 2014

EtherNet/IP bandwidth:  
12,000 pps



**EtherNet/IP Coupler Unit**  
NX-EIC202

**Released**  
in January 2015



**EtherCAT Slave Unit**  
CJ1W-ECT21

**Released**  
in April 2015



**Analog Option Board**  
CP1W-ADB21/  
DAB21V/MAB221

**Version Upgraded**  
in January 2015

Now mountable to CP1E



**Temperature Sensor Unit**  
CP1W-TS003/004

**Analog Input Unit**  
CP1W-AD041/AD042

**Released** in January 2015

**Analog Output Unit**  
CP1W-DA021/DA041/DA042

**Analog I/O Unit**  
CP1W-MAD11/MAD42/MAD44

realizing

# The CS/CJ/CP Series with a proven track record provide **improved and additional functionality**

Design asset protection, increase in machine performance, coping with frequent changes in specifications ... To provide the best solution for your needs, Omron has worked on the further development of the proven CS/CJ/CP Series.

CS

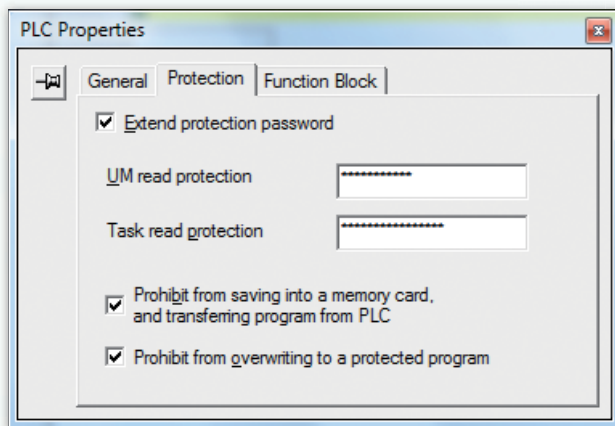
CJ

CP

## 16-character password to keep your assets secure

Version upgraded  
October 2015

The number of characters in each password for UM read protection and task read protection is increased from 8 to 16. This improves the security of your design assets.



CS

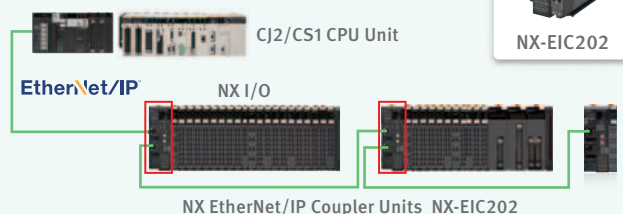
CJ

New NX EtherNet/IP Coupler Unit

## More flexible machine design

New product  
January 2015

The NX-EIC202 EtherNet/IP Coupler Unit enables a flexible distributed I/O system to be built using NX I/O in the CJ2/CS1 system. This allows you to save space and to flexibly respond to changes in machine specifications.

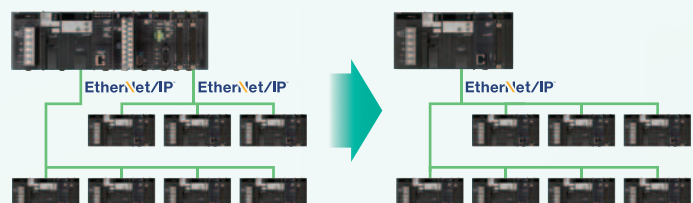


Increased EtherNet/IP bandwidth to 12,000 pps

## Improving production efficiency

Version upgraded  
December 2014

The EtherNet/IP bandwidth of the CS/CJ Series was increased from 6,000 pps to 12,000 pps. Improved communications performance will reduce the communications cycle time, resulting in a reduction in production cycle time. EtherNet/IP networks can be combined into a single topology, which means the network configuration is simplified.



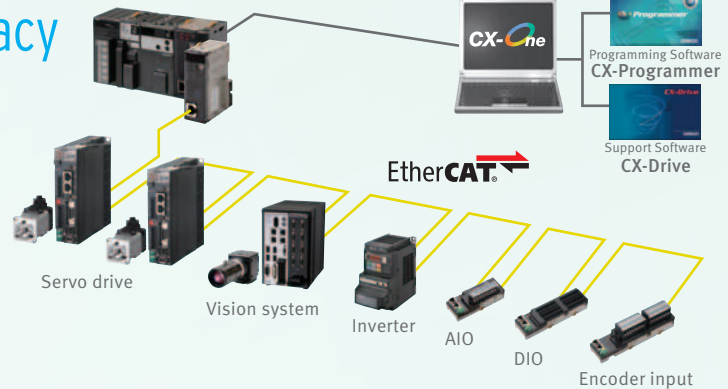
# CJ

Upgraded CJ1W-NC□82 Position Control Unit with EtherCAT interface

## Electronic cam synchronization to increase machine accuracy

Version upgraded  
October 2015

The CJ1W-NC□82 Position Control Unit with EtherCAT interface now provides the electronic cam/helical interpolation functionality. Multi-axes synchronous control increases the speed and accuracy of your machine, leading to a shorter cycle time.



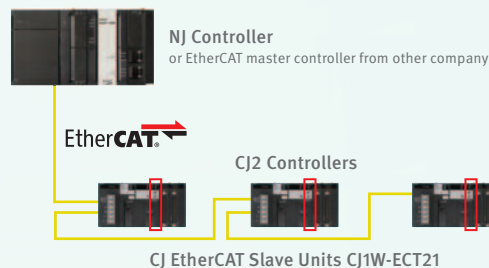
CJ1W-NC□82

New EtherCAT Slave Unit for CJ/NJ Series

## Distributed control for easy design and installation

New product  
April 2015

The CJ1W-ECT21 EtherCAT Slave Unit enables high-speed I/O link based on EtherCAT and distributed control using multiple controllers. The modularized system facilitates the design and installation of machines.



CJ1W-ECT21

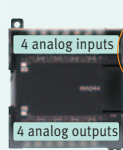
# CP

## More scalable

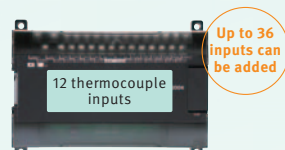
The unit with multiple analog I/O or with multiple temperature sensor inputs provides more scalability and flexibility. Up to three expansion units can be added.

New product  
January 2015

Applications: Molding machines, ovens



CP1W-MAD44



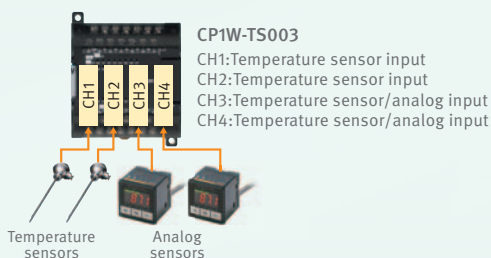
CP1W-TS004

## Flexible multi-inputs: thermocouple/analog inputs

New product  
January 2015

The CP1W-TS003 has two inputs that can be used for temperature sensor or analog inputs. Both temperature sensor and analog inputs can be achieved with only one Unit.

Applications: Vacuum packaging machines, sterilization equipment



## High resolution to improve control/inspection accuracy

New product  
January 2015

The CP1W-AD04□/CP1W-DA0□□/CP1W-MAD□□ Analog I/O Units provide high-accuracy analog I/O control with a resolution of 1/12,000.

Applications: Inspection machines, tension control

Previous model  
(Resolution: 1/6,000)

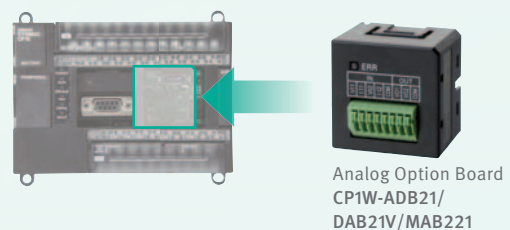
New model  
(Resolution: 1/12,000)



## Saving space

Version upgraded  
January 2015

The add-on board offers more scalability without using space in the control panel. Flexibly handle even small-scale systems.



## New Functions and Versions

| Function  | Model                          | Unit version                            | Software version                               |
|---|--------------------------------|---|--|
| Extended UM read password protection (16 characters) *1 | CJ2M-CPU□□                     | Version 2.1 or later                    | CX-Programmer<br>Version 9.60 or higher *2     |
|   | CJ2H-CPU□□ (-EIP)              | Version 1.5 or later                    |  |
|   | CJ1G-CPU□□P                    | Version 4.1 or later                    |  |
|   | CS1G-CPU□□H                    | Version 4.1 or later                    |  |
|   | CS1H-CPU□□H                    | Version 4.1 or later                    |  |
|   | CS1D-CPU□□H                    | Version 1.4 or later                    |  |
|   | CS1D-CPU□□P                    | Version 1.4 or later                    |  |
|   | CS1D-CPU□□S                    | Version 2.1 or later                    |  |
|   | CP1L- (E) M/L                  | Version 1.1 or later                    |  |
|   | CP1H-X (A) /Y                  | Version 1.3 or later                    |  |
|   | CP1E (All models)              | Version 1.3 or later *3                 |  |
| Increased EtherNet/IP bandwidth to 12,000 pps           | CJ1W-EIP21                     | Version 3.0 or later                    | Network Configurator<br>Version 3.57 or higher |
|   | CS1W-EIP21                     | Version 3.0 or later                    |  |
|   | CJ2H-CPU□□-EIP (Built-in port) | Version 3.0 or later (EtherNet/IP Unit) |  |

\*1 When using an extended password, use the CPU Unit and CX-Programmer that support extended passwords.

\*2 Implement the CX-One auto-update in October 2015 or later.

\*3 Shipment of the CP1E version 1.3 will commence in January 2016.

## Connectable CPU Units and Support Software

| Product name and model   | Unit version          | Connectable Unit                    | Unit version         | Software version                               |
|--|-----------------------|-------------------------------------|----------------------|--|
| EtherCAT Slave Unit<br>CJ1W-ECT21  | Version 1.00          | CJ-series CPU Units                 | All versions         | CX-Programmer<br>Version 9.54 or higher        |
|  |                       | CP-series CPU Units                 |                      |  |
| EtherNet/IP Coupler Unit<br>NX-EIC202  | Version 1.00          | CJ1W-EIP21                          | All versions         | Network Configurator<br>Version 3.57 or higher |
|  |                       | CS1W-EIP21                          |                      |  |
|  |                       | CJ2H-CPU□□-EIP (Built-in port)      |                      |  |
|  |                       | CJ2M-CPU3□ (Built-in port)          |                      |  |
| Position Control Unit with EtherCAT interface<br>CJ1W-NC□82                            | Version 1.50 or later | CJ-series CPU Units                 | All versions         | CX-Programmer<br>Version 9.62 or higher        |
| Temperature Sensor Unit<br>CP1W-TS003 (Multi-inputs)<br>CP1W-TS004 (12 inputs)         | —                     | CP1□ CPU Units                      | All versions         | Not specified                                  |
| Analog I/O Unit (High resolution)<br>CP1W-AD042<br>CP1W-DA042<br>CP1W-MAD□2            | —                     | CP1□ CPU Units                      | All versions         | Not specified                                  |
| Analog Option Board<br>CP1W-ADB21 (Input)<br>CP1W-DAB21V (Output)<br>CP1W-MAB221 (I/O) | —                     | CP1E-N30/40/60D□-□<br>CP1E-NA20D□-□ | Version 1.2 or later | Not specified                                  |
|  |                       | CP1L-EM/EL                          | All versions         | Not specified                                  |

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