OMRON

CS/CJ/CP Series with a proven track record

New Functions Added to CS/CJ/CP Series

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

Increased security

CS/CJ/CP CPU Units

Version Upgraded in October 2015
More secure 16-character password protection for user programs

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

Analog Output Unit
CP1W-DA021/DA041/DA042
Analog I/O Unit
CP1W-MAD11/MAD42/MAD44
**Released** in January 2015

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**
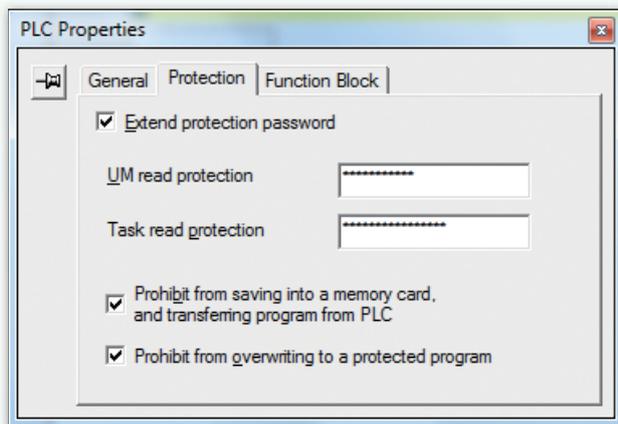
New NX EtherNet/IP Coupler Unit
More flexible machine design
New product January 2015

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.

CJ2/CS1 CPU Unit

NX-EIC202

EtherNet/IP   NX I/O

NX EtherNet/IP Coupler Units NX-EIC202
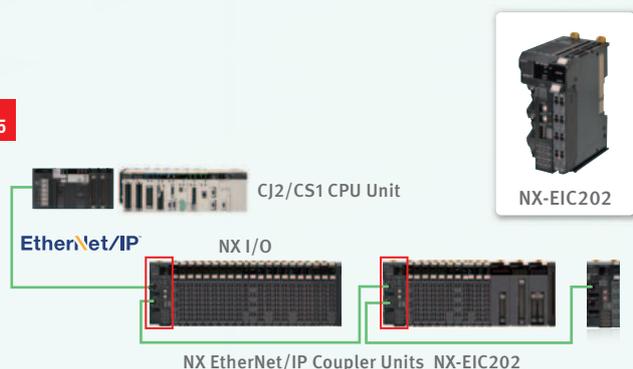
Increased EtherNet/IP bandwidth to 12,000 pps
Improving production efficiency
Version upgraded December 2014

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.

EtherNet/IP   EtherNet/IP   EtherNet/IP
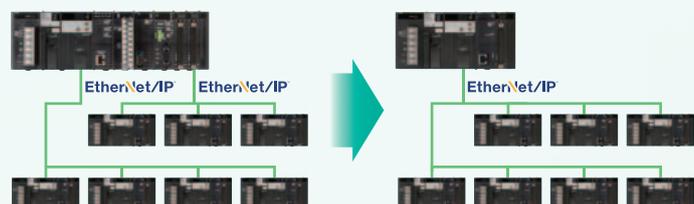
CJ

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

CX-One

Programming Software
CX-Programmer

Support Software
CX-Drive

EtherCAT

Servo drive

Vision system

Inverter

AIO

DIO

Encoder input

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.

NJ Controller
or EtherCAT master controller from other company

EtherCAT

CJ2 Controllers

CJ1W-ECT21

CJ EtherCAT Slave Units CJ1W-ECT21

CP

More scalable
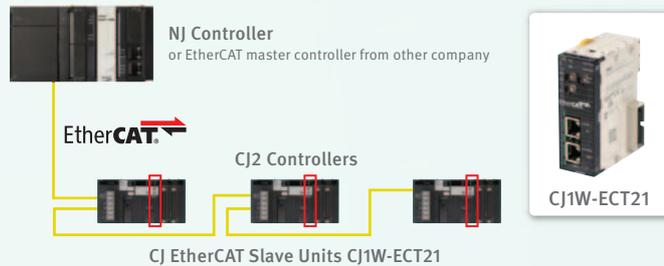
New product January 2015

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.

Applications: Molding machines, ovens

4 analog inputs

Up to 24 I/Ocan be added

4 analog outputs

12 thermocouple inputs
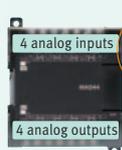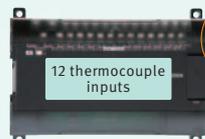
Up to 36 inputs can be added

CP1W-MAD44

CP1W-TS004

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)
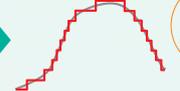
Twice higher resolution

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

CH1 CH2 CH3 CH4
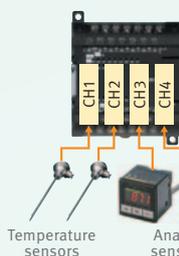
CP1W-TS003
CH1:Temperature sensor input
CH2:Temperature sensor input
CH3:Temperature sensor/analog input
CH4:Temperature sensor/analog input

Temperature sensors

Analog sensors

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.
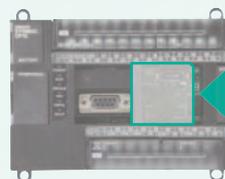
Analog Option Board
CP1W-ADB21/ DAB21V/MAB221

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

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