

# CP2E Communication-Enhanced Small PLC

## Product Guide



## Overview

The CP2E series of programmable logic controllers from Omron provides unmatched performance with a compact footprint. Designed for small- to medium-sized machines, the CP2E offers new features that were previously only available in higher-end controllers. Enhanced communication enables machine-to-machine data transfer and facilitates IIoT applications.

With fast instruction and scan times coupled with better environmental ratings, expansion options and up to four axes of motion, the CP2E can enhance the performance and value of any machine design

### Applications

- Dry packaging and sealing machines
- Filling and capping machines
- Metal or plastic machining tools
- Plastic molding machines

### Primary Benefits

- Compact footprint allows machine builders to add more features and increase value
- Enhanced communications can bring a machine design into the IIoT era
- Optional NB or NS Series HMIs from Omron can offer visualization into machine operations

## Key features

- Up to five communications channels: dual Ethernet and up to three serial ports for data collection, machine-to-machine or IIoT
- Built-in I/O of either 14, 20, 30, 40 or 60 points with up to 180 I/O points when using expansion modules for larger machines
- Up to four axes of motion control for precise machine movement
- Enhanced operational temperature rating of -20°C to +60°C for harsh environments
- Function block library for expedited program development
- Analog, high speed counters, pulse outputs, linear interpolation and PWM output facilitates a wide range of applications

## Product Selection



CPU Units

CP2E-N/Network Models

I/O points	Specifications														
	Power supply	Inputs	Outputs	Output type	Communications	Axis	Option Boards	Expansion Units	Model						
14	100 to 240 VAC	8	6	Relay	1 Ethernet port Up to 2 serial ports	2	1		CP2E-N14DR-A						
	Transistor (sinking)			CP2E-N14DT-A											
	24 VDC			Relay					CP2E-N14DR-D						
	Transistor (sinking)			CP2E-N14DT-D											
	24 VDC			Transistor (sourcing)					CP2E-N14DT1-D						
	100 to 240 VAC			12					8	Relay	1 Ethernet port Up to 2 serial ports	2	1		CP2E-N20DR-A
	24 VDC									Transistor (sinking)					CP2E-N20DT-A
	Relay									CP2E-N20DR-D					
Transistor (sinking)	CP2E-N20DT-D														
	24 VDC			Transistor (sourcing)					CP2E-N20DT1-D						
	100 to 240 VAC			18					12	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N30DR-A
	24 VDC									Transistor (sinking)					CP2E-N30DT-A
	Relay									CP2E-N30DR-D					
Transistor (sinking)	CP2E-N30DT-D														
	24 VDC			Transistor (sourcing)					CP2E-N30DT1-D						
	100 to 240 VAC			24					16	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N40DR-A
	24 VDC									Transistor (sinking)					CP2E-N40DT-A
	Relay									CP2E-N40DR-D					
Transistor (sinking)	CP2E-N40DT-D														
	24 VDC			Transistor (sourcing)					CP2E-N40DT1-D						
	100 to 240 VAC			36					24	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N60DR-A
	24 VDC									Transistor (sinking)					CP2E-N60DT-A
	Relay									CP2E-N60DR-D					
Transistor (sinking)	CP2E-N60DT-D														
	24 VDC			Transistor (sourcing)					CP2E-N60DT1-D						

### CP2E-S/Standard Models

I/O points	Specifications								
	Power supply	Inputs	Outputs	Output type	Communications	Axis	Option Boards	Expansion Units	Model
30	100 to 240 VAC	18	12	Relay	1 x RS-232C port 1 x RS-485 port	2		3	CP2E-S30DR-A
	24 VDC			Transistor (sinking)					CP2E-S30DT-D
	Transistor (sourcing)			CP2E-S30DT1-D					
40	100 to 240 VAC	24	16	Relay	1 x RS-232C port 1 x RS-485 port	2		3	CP2E-S40DR-A
	24 VDC			Transistor (sinking)					CP2E-S40DT-D
	Transistor (sourcing)			CP2E-S40DT1-D					
60	100 to 240 VAC	36	24	Relay	1 x RS-232C port 1 x RS-485 port	2		3	CP2E-S60DR-A
	24 VDC			Transistor (sinking)					CP2E-S60DT-D
	Transistor (sourcing)			CP2E-S60DT1-D					

### CP2E-E/Essential Models

I/O points	Specifications								
	Power supply	Inputs	Outputs	Output type	Communications	Axis	Option Boards	Expansion Units	Model
14	100 to 240 VAC	8	6	Relay	1 x RS-232C port			3	CP2E-E14DR-A
20		12	8	Relay	1 x RS-232C port			3	CP2E-E20DR-A
30		18	12	Relay	1 x RS-232C port			3	CP2E-E30DR-A
40		24	16	Relay	1 x RS-232C port			3	CP2E-E40DR-A
60		36	24	Relay	1 x RS-232C port			3	CP2E-E60DR-A

Note: Specifications are subject to change.

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