



Master: CPS-PC341EC-1-9201 Slaves: SVR-K112 SVR-K221



CONPROSYS Series CODESYS EtherCAT Master BATT CPS-PC341EC-1-9201



- * Specifications, color and design of the products are subject to change without notice.
- * CODESYS® is a registered trademark of 3S-Smart Software Solutions GmbH

Hardware Features

Adaptable to a temperature range between -20 and +60°C

The product is capable of operating in the temperature between -20 and + 60°C. It can be installed in the various environments.

Compact design

Compact design, $188.0(W) \times 78.0(D) \times 30.5(H)$, features flexibility in installation.

A powerful running platform without fan

The product contains the ARM® Cortex®-A8 processor (600MHz) and the DDR3 512MB system memory.

Capable of adapting a wide-range power (12-24VDC)

The product is capable of dealing with a wide range of power in the differing environments. Power connector also has a FG terminal.

Easy installation with screws or on DIN rail

This product can be installed on the wall with screws or on DIN rail with simple mounting.

Installation with two pieces of terminal support

The terminal connector can be removed without a screwdriver. Even when a malfunction occurs, this product can be replaced in a short length of time.

Equipped with LED for an operation check

The product has LED for an operation check, which helps you visually confirm the communication status of each interface.

Choice of a battery with a longer life

With a choice of a long-life battery, the Contec is creating longer lasting products.

This product is an EtherCAT Master controller equipped with ARM®Cortex®-A8 processor (600MHz) and 512MB DDR3-SDRAM. Onboard NOR-FLASH is utilized for a booting device.

This product contains the CODESYS* Soft PLC and Soft Motion.

You can create your own PLC program and run with the CODESYS software.

CODESYS is a device- independent-PLC-programming system that is compliant with the IEC 61131-3 standard and supports all standard programming languages such as ST or LD.

- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details in the document.
- * The information in the data sheets is as of August, 2019.

Software Features

Feature the CODESYS*SoftPLC and SoftMotion

CODESYS is a device-independent-PLC-programming system that is compliant with the IEC 61131-3 standard and supports all standard programming languages such as ST or LD.

Harmonize with EtherCAT Master

EtherCAT is a strong, efficient real-time Ethernet field bus system with an open protocol.

Together with OPC UA Server

OPC UA (Unified Architecture) is an advanced model of OPC specifications, which presents refined capability of communicating with higher-order system in addition to transferring and receiving data of devices or plants. OPC-UA is a platform independent standard based on TCP. This product can be operated with HMI and SCADA software that support OPC UA clients from various makers.

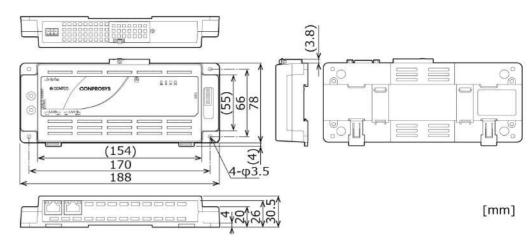
Specifications

Function specifications

ttern		CPS-PC3418C-1-9201
CODESYS compatible function	Version	V3.5 SP7 Patch2 or any later version
	Language	LD, SFC, FBD, ST, IL, CFC (IEC61131-3 compliant)
	Field bus	EtherCAT Master, Modbus TCP Slave
	Communication protocol	OPC UA Server
Program size	ROM size	1MB
	The number of maximum steps	250K steps
CPU basic performance	Basic command operation speed (LD)	1.6ns
	Applied command operation speed (ST)	5.8ns
	Scan time	74µs (at 20000 Steps)
EtherCAT performance	Input processing time (LD)	144ns
	Output processing time (ST)	138ns
	Scan time	166µs (64 inputs and 64 outputs)



Physical Dimensions



DIN rail mounting power supply

CPS-PWD-15AW12-01 DIN rail mounting power supply 15[w]

(Input: 100 - 240VAC, output: 12VDC 1.3 A)

SD card

SD-4GB-A SD card 4GB

Magnet

CPS-MAG01-4: Magnets for installation (Four Piece Set)

Hardware specifications

	Item	CPS-PC341EC-1-9201
CPU		ARM Cortex-A8 600MHz
Memory		On Board 512MB DDR3 SDRAM
ROM		On-Board 32MB NOR Flash for OS
LAN	Transmission standard	10BASE-T/100BASE-TX
	The number of channels	2
	Connector	RJ-45 Connector
	LED	Speed (Yellow), Link/Act (Green)
SD card slot	Standard	SD standard follow
	Connector	SD memory card slot
	LED	Read/Write (Yellow)
LED		Power (Green)/Status 1 (Green)/Status 2 (Red)
Switch		Reset SW, Shut Down SW,
RTC		RTC built-in (battery life:10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C)
Power supply *1	Rated input voltage	12 - 24VDC
	Input voltage range	10.8 - 30VDC
	Power consumption	12V 0.3A (Max.), 24V 0.2A (Max.)
	Connector	2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG)
	Applicable wire	AWG24 - 16
	Surge protection element V+ - V-, V FG	Interactive TVS diode Stand off voltage: ±30V, Peak pulse power: 400W(1msec)
Physical dimensions (mm)		188.0(W)×78.0(D)×30.5(H) (No projection included)
Weight		250g
Installation method		Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *2
OS		Linux kernel 3.2

^{*1} Use power cable within 3meters.

^{*} Visit the Contec website for the latest optional products.

^{*2} Commercial screws are required (fit into φ3.5 hole).

Intuitive software

- Compatible with INDA4
- Table structured Modbus communication command
- Plan of equipment communication network easily
- All editors of the IEC 61131-3(LD/FBD/ST/SFC/IL/CFC)
- Support multi-language operation

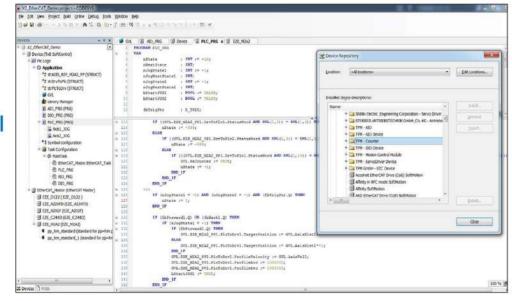






HMI Interface

CODESYS Control Program



EtherCAT® Close-Loop Drive

SVR-K112



1-Axis Close-Loop Drive

Features

- Max. 100Mbps transfer rate
- 1-axis Close-Loop Control
- K112: Current 4.2A
- Bi-polar current driving system
- Resolution: 500~50,000 pulse/revolution
- Encoder feedback
- DIP switch for address setting
- Dimensions: L-74 x W-140 x H-31 mm

SVR-K221



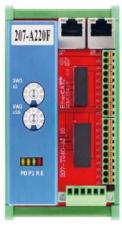
2-Axis Close-Loop Drive

Features

- Max. 100Mbps transfer rate
- 2-axis Close-Loop Control
- K221: Current 1.8A / axis
- Bi-polar current driving system
- Resolution: 500~50,000 pulse/revolution
- Encoder feedback
- · DIP switch for address setting
- Dimensions: L-75 x W-140 x H-47 mm

EtherCAT® Analog Slave

207-A220F



EtherCAT® 8-Ch.AI

Features

- Max. 100Mbps transfer rate
- 8-Ch. 16-bit Analog input (AI) w. ±10V
- Rotary switch for address setting
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIN rail mounting (L-122 x W-65 x H-104 mm)

207-A204F



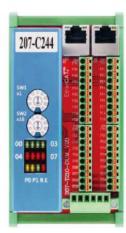
EtherCAT® 8-Ch.AO

Features

- Max. 100Mbps transfer rate
- 8-Ch. 16-bit Analog output (AO)
- Rotary switch for address setting
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIN rail mounting (L-122 x W-65 x H-104 mm)

EtherCAT® Motion Slave

207-C244C/D



EtherCAT® 4-Ch.Encoder Slave

Features

- Max. 100Mbps transfer rate
- Rotary switch for address setting
- Max. 4MHz Encoder input frequency
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIN rail mounting (L-122 x W-65 x H-104 mm)

207-C244C

- 4 DI
- 4 Compare Trigger Max. 100KHz

207-C244D

4DI / 4DO

207-M2A2-GEN



EtherCAT® 2-Axis Motion Controller

Features

- Max. 100Mbps transfer rate
- Ultra compact, a 2-axis integrated controller
- Max. 6.5MHz pulse output rate
- 32-bit counter for incremental encoder
- Programmable acceleration and deceleration time
- T-curve and S-curve velocity profiles support
- Easy installation with RJ45 phone jack and LED diagnostic
- DIN rail mounting (L-122 x W-65 x H-104 mm)

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EtherCAT® Digital Slave

207-D411H-NNS/PPS EtherCAT® 16-Ch.DI/O

Features

- Max. 100Mbps transfer rate
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-65 x H-104 mm)

▶ 207-D411H-NNS 8-Ch. DI and 8-Ch. DO with NPN type

▶ 207-D411H-PPS 8-Ch. DI and 8-Ch. DO with PNP type

207-D222-NNS/PPS

EtherCAT® 32-Ch.DI/O

Features

- Max. 100Mbps transfer rate
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-65 x H-104 mm)

▶ 207-D222-NNS 16-Ch. DI and 16-Ch. DO with NPN type

▶ 207-D222-PPS 16-Ch. DI and 16-Ch. DO with PNP type

207-D521-NNS/PPS

EtherCAT® 48-Ch.DI/O

Features

- Max. 100Mbps transfer rate
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-92 x H-104 mm)

▶ 207-D521-NNS 32-Ch. DI and 16-Ch. DO with NPN type

▶ 207-D521-PPS 32-Ch. DI and 16-Ch. DO with PNP type

EtherCAT® Digital Slave

207-D522-NNS/PPS

EtherCAT® 64-Ch.DI/O

Features

- Max. 100Mbps transfer rate
- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-105 x H-104 mm)

▶ 207-D522-NNS 32-Ch. DI and 32-Ch. DO with NPN type

▶ 207-D522-PPS 32-Ch. DI and 32-Ch. DO with PNP type

207-D532-NNS/PPS

Features

Max. 100Mbps transfer rate

EtherCAT® 80-Ch.DI/O

- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-116 x H-104 mm)

▶ 207-D532-NNS 48-Ch. DI and 32-Ch. DO with NPN type

▶ 207-D532-PPS 48-Ch. DI and 32-Ch. DO with PNP type

207-D533-NNS/PPS

Features

Max. 100Mbps transfer rate

EtherCAT® 96-Ch.DI/O

- Easy installation with RJ45 phone jack and LED diagnostic
- Pluggable terminal block with spring plug connectors
- DIP switch for address setting
- DIN rail mounting (L-122 x W-127 x H-104 mm)

▶ 207-D533-NNS 48-Ch. DI and 48-Ch. DO with NPN type

▶ 207-D533-PPS 48-Ch. DI and 48-Ch. DO with PNP type

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