

EtherCAT[®]



Master : CPS-PC341EC-1-9201

Slaves : SVR-K112 SVR-K221



 CONTEC



Taiwan Pulse Motion
Inspire New Automation
www.tpm-pac.com



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.

Software Features

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

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.

Function specifications

Item		CPS-PC341EC-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)

Technical drawings of the OONPROSYS 5000 device showing front, top, and side views with dimensions in mm.

Front View Dimensions:

- Overall width: 188 mm
- Overall height: 78 mm
- Internal width (excluding side panels): 154 mm
- Internal height (excluding top and bottom sections): 66 mm
- Bottom section height: 4 mm
- Side panel thickness: 3.5 mm

Top View Dimensions:

- Overall width: 188 mm
- Overall height: 78 mm
- Internal width (excluding side panels): 154 mm
- Internal height (excluding top and bottom sections): 66 mm
- Bottom section height: 4 mm
- Side panel thickness: 3.5 mm

Side View Dimensions:

- Overall width: 188 mm
- Overall height: 78 mm
- Internal width (excluding side panels): 154 mm
- Internal height (excluding top and bottom sections): 66 mm
- Bottom section height: 4 mm
- Side panel thickness: 3.5 mm

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

*2 Commercial screws are required (fit into $\phi 3.5$ hole).

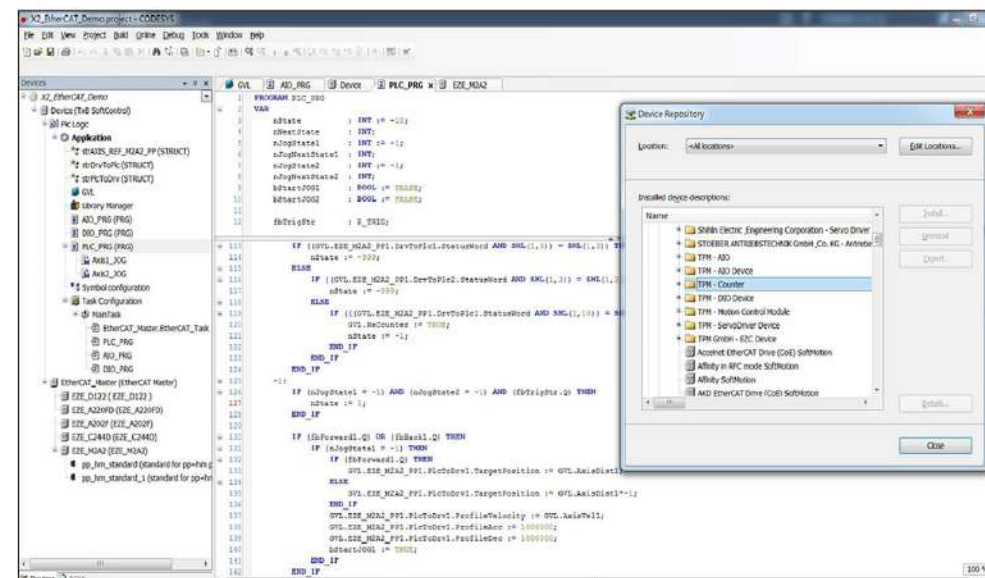
Intuitive software

- 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



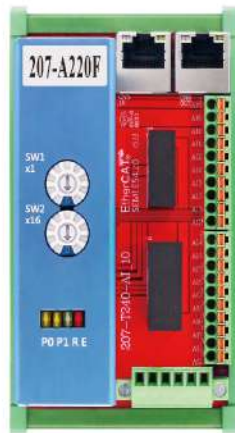
2-Axis Close-Loop Drive

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

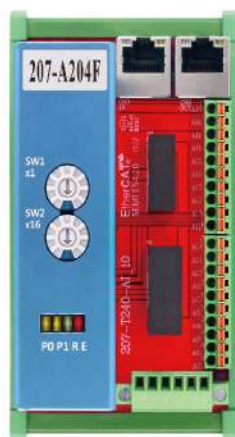


EtherCAT® 8-Ch.AI

Features

- Max. 100Mbps transfer rate
- 8-Ch. 16-bit Analog input (AI) w. $\pm 10V$
- 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



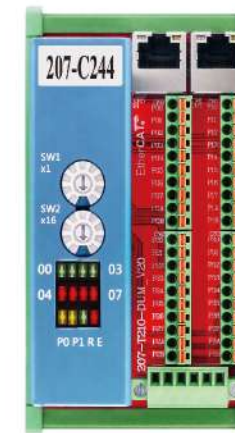
EtherCAT® 8-Ch.AO

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

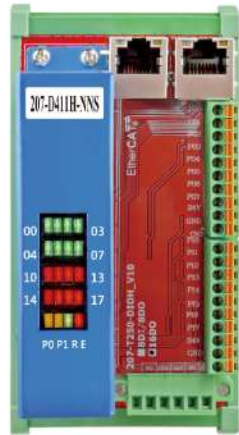
Features

- 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)

EtherCAT® Digital Slave

207-D411H-NNS/PPS

EtherCAT® 16-Ch.DI/O



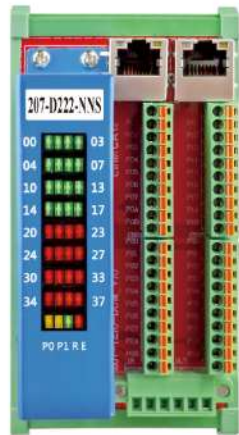
Features

- 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



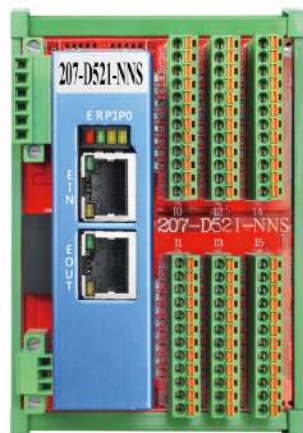
Features

- 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



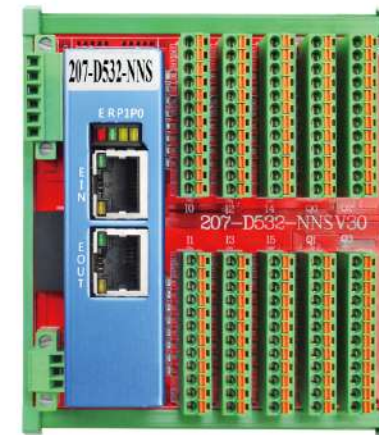
Features

- 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

EtherCAT® 80-Ch.DI/O



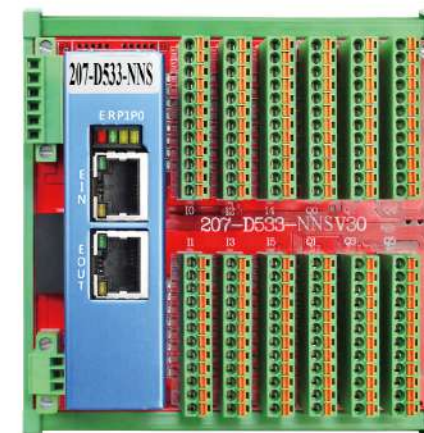
Features

- 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-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

EtherCAT® 96-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-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