

* Specifications, color and design of the products are subject to change without notice.

This product is a Modbus Master controller with isolated RS-422A/485, isolated digital input/output, isolated counter input, inter-channel isolated analog input, RS232C, and LAN interface.

This product contains the CODESYS* Soft PLC.

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

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

*CODESYS® is a registered trademark of 3S-Smart Software Solutions GmbH

- * 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 September, 2019.

Hardware features

Max. 115,200bps RS-422A/485 Serial Communication and RS-232C Serial Communication

The Product has one RS-422A/485-standard serial port and one RS-232C-standard serial port.

Baud rates from 300 to 115,200 bps can be set.

Opto-coupler isolated input (compatible with current sink output) and semiconductor-relay output

The product has the 4 channels of opto-coupler isolated input (compatible with current sink output) and 2 channels of semiconductor-relay output.

Counter input capable of up-counting

The product has 2 channels of counter inputs capable of up-counting.

* 2 out of the digital input 4 channels can be assigned to the counter input.

Bus-isolated analog input module

The product has 2ch of bus-isolated analog input. It supports differential input and is capable of precise measurement of voltage with potential differences.

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

The product is capable of operating in the temperature between -20 and $+60^{\circ}$ 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.

Decrease malfunctions or damages by bus isolation and surge protection (RS-422A/485, digital/counter input)

Electrical isolation between the RS-422A/485 and the CPU, as well as between the digital/counter input and CPU can block electrical noise flow. Moreover, the surge protection elements are used for signal line and on top of that, the RS-422A/485 is protected with the communication IC that can withstand ±70 V input voltage, which reduces malfunctions or damages by surge.

Decrease malfunctions or damages by bus isolation, inter-channel isolation and surge protection. (Analog input)

As analog inputs and channel, along with analog inputs and CPU, are electrically isolated, connecting an input signal with electric potential difference is possible. In addition, the surge protection elements are used for signal lines, which reduces malfunctions or damages by surge

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.

Software features

Feature the CODESYS SoftPLC

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 Modbus TCP Master

Modbus is a communication protocol widely used in the industry. It can collect data and control the device for Modbus TCP Slave-compliant.

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.

CPS-PC341MB-ADSC-9201 1



Specifications

Function specifications

Item		CPS-PC341MB-ADSC1-9201
CODESYS compatible function	Version	V3.5 SP7 Patch2 or any later version
	Language	LD, SFC, FBD, ST, IL, CFC (IEC61131-3 compliant)
	Field bus	Modbus TCP Master / Slave, Modbus RTU Master / 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)

Hardware specifications

	Item	CPS-PC341MB-ADSC1-9201
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)
RS-422A/485	Transmission scheme	Asynchronous serial transmission (Full Duplex/Half Duplex) * Only full Duplex is supported by CODESYS
	The number of channels	1
	Isolation/Resistance	Bus Isolation/500VDC(when surge protected parts between SG-FG are unimplemented)
	Baud Rate	300bps - 115.2kbps
	Data length	5, 6, 7, 8bit 1, 1.5, 2stopbit
	Parity check	Even, Odd, Non-parity
	Connector	2-piece 3.5mm pitch 5-pin terminal (TX+, TX-, RX+, RX-, SG)
	Applicable wire	AWG28 - 16
	LED	Transmission (Yellow), Reception (Yellow)
	Switch	DIP Switch (Full Duplex/Half Duplex, Terminator (ON/OFF))
	Surge protection element each signal - SG	Interactive TVS diode Stand off voltage : ±13V, Peak pulse power : 400W(1msec)
	Surge protection element SG - FG	Gas discharge tube arrester Discharge voltage : ±300V, impulse current tolerance : 2000A(8/20µsec, 10 times)
USB	Transmission standard	USB2.0 standard follow
	The number of channels	1
	Connector	TYPE-A
SD card slot	Standard	SD standard follow
	Connector	SD memory card slot
	LED	Read/Write (Yellow)
RS-232C	Baud Rate	300bps - 115.2kbps
	Isolation/Resistance	Non-isolated
	Data length	5, 6, 7, 8bit 1, 1.5, 2stopbit
	Parity check	Even, Odd, Non-parity
	The number of channels	1
	Connector	9-pin D-SUB connector (Male)
	LED	Transmission (Yellow), Reception (Yellow)
Digital input/ Counter input	Input type	Opto-coupler Isolation Input (Compatible with current sink output) (negative logic) *1
	Isolation/Resistance	Bus Isolation /500VDC, Opto-coupler Isolation/1000V
	Built-in power supply	12VDC
	Input resistance	5.6kΩ
	Input ON current	1.6mA or more
	Input OFF current	0.16mA or less
	Response time	Within 200µsec *2
	Interrupt (Digital input)	4 interrupt input signals are arranged into a single output of interrupt signal. An interrupt is generated at the falling edge (HIGH-to-LOW transition) or rising edge (LOW-to-HIGH transition). (setting can be done by software)

The number of channels		Item	CPS-PC341MB-ADSC1-9201
Max count FFFFFH (binary data)		The number of channels	4 (It is possible to allocate 2channels to counter input)
Counter response speed 18-btz (Max), Dury; 5976 (Max) Interrupt (Counter input) One interrupt caused upon channel count match Timer None LED Di0 - Di3 (fellow) Surge protection element each signal to 8, COM Sand off-voltage: ±30V, Peak pulse power: 400W(1msec) Digital inuty. The number of channels 2 DO0 - DO1 (fellow) Surge protection element + to - Surge protection element + to - Sand off-voltage: ±30V, Peak pulse power: 400W(1msec) Surge protection element + to - Sand off-voltage: ±30V, Peak pulse power: 400W(1msec) Sand off-voltage: ±30V, Peak pulse power: 400W(1msec) Digital inuty. Connector 2-piece 35mm pitch 10-pin terminal DIACADO, PIO D1 D2 D13, D12 D13, D13, D13, D14, D14, D14, D14, D14, D14, D14, D14		Count type	Up count
Interrupt (Counter input) Timer None LED DIO - DI3 (Yellow) Surge protection element each signal to B_COM Sard off Voltage :: 30M, Peak pulse power : 400W (Imsec) Bolation/Resistance Maximum output voltage / 264VAC/VDC/100mA Response time ON resistance Response time ON resistance ON resistance ON resistance BO or less (at 25°C) The number of channels LED Digital input/ Digital output Counter input/ Digital output Applicable wire Amalog input Input type Connector Applicable wire Aralog input Input impedance Data buffer Conners witching rate Conneston Channel switching rate Conneston Channel switching rate Conneston Channel switching rate Connector Data buffer None Resolution Resolution Applicable wire AMCS2B - 16 Channel switching rate Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution Resolution Applicable wire AMCS2B - 16 Channel switching rate Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution Resolution Resolution Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching Witch Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching Non-All (Yellow) Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching None (Green)/Status 1 (Green)/Sta		Max count	FFFFFH (binary data)
Timer None LED DIO - DI3 (kellow) Surge protection element element eleotation follogies: 330/, Peak pulse power: 400W(1msec) Digital output Couput type Semiconductor relay output leotation/Resistance Semiconductor relay output leotation/Resistance Semiconductor relay isolation/1000V Maximum output voltage/ Country (264/AC/VDC/100mA current Response time Within 2msec ON resistance ON resistance Boor less (at 25°C) The number of channels 2 LED DOO - DO1 (kellow) Surge protection element + 10 - DO0 - DO1 (kellow) File protection element + 10 - DO0 - DO1 (kellow) Digital input / Counter input / DO0 - DO1 (kellow) Digital input / Counter input / DO1 - DO1 (kellow) Applicable wire AWC38 - 16 Analog input Input type Connector Seminary (100-1) DO1		Counter response speed	1kHz (Max.), Duty: 50% (Max.)
LED Di0-Di3 (Yellow)		Interrupt (Counter input)	One interrupt caused upon channel count match
Surge protection element each signal to 8, COM Stand off voltage : ±307, Peak pube power : 400W(1msec) Digital output August type Semiconductor relay output Solation/Resistance Maimum output voltage/ Current Response time ON resistance OFF leakage current 4µA or less (at 25°C) OFF leakage current 4µA or less (at 25°C) The number of channels LED OO0 - DO1 (Yellow) Surge protection element to 100 - DO1 (Yellow) Surge protection element public output Applicable wire Analog input Input type Input range Aralog input Input range Aralog input Input range O - 20mA Maximum input rating Input range Aralog input Input range O - 20mA Maximum input rating Input range Input range Input range O - 20mA Maximum input rating Input range Input range Input range Input range Input range Input range		Timer	None
each signal to B_COM Stand off voltage : ±30/. Peak pulse power : 400W(1msec) Digital output Semiconductor relay solation/1000V		LED	DIO - DI3 (Yellow)
Isolation/Resistance Semiconductor relay isolation/1000V			
Maximum output voltage/ current Response time Within 2msec	Digital output	Output type	Semiconductor relay output
Current Response time Within 2msec		Isolation/Resistance	Semiconductor relay isolation/1000V
ON resistance 8Ω or less (at 25°C)			26.4VAC/VDC/100mA
OFF leakage current 4μA or less (at 25°C) The number of channels 2 LED DO0 - DO1 (Vellow) Surge protection element + b - DO0 - DO1 (Vellow) Surge protection element + connector Conn		Response time	Within 2msec
The number of channels 2 LED DO0 - DO1 (Yellow) Surge protection element + to - Surge protection included on the wall land was a surge protection included on the wall land was proportion of the surge process of the surge protection included on the wall land was proportion in the surge protection element to the surge protection element to the surge protection included) Physical dimensions (mm) The number of channels Sarm pitch 1 pip the pip the protection included) was protection element to -2 piece 3.5mm pitch 3.5mm pitc		ON resistance	8Ω or less (at 25°C)
LED DOO - DO1 (Yellow)		OFF leakage current	4μA or less (at 25℃)
Surge protection element + to - Surge protection element + to - Connector		The number of channels	2
+ to - ' Stand off voltage : ±30V, Peak pulse power : 400W(1msec)		LED	DO0 - DO1 (Yellow)
Counter input / Digital output Digital output Applicable wire AWG28-16 Input type Current Input Input type O-20mA Maximum input rating 30mA Input impedance 250\(\Omega \) Differential Input 2ch Channel switching rate 3msec/ch (Max) *3 Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10.58 Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (Al+, Al-, AG) Applicable wire AWG28-16 LED Al0-Al1 (Yellow) Al1 (Yellow) LED Reset SW, Shut Down SW, Full Duplev/Half Duplex Switching SW Rick dinput voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24-16 Interactive TVs diode Stand off voltage : ±30V, Peak pulse power : 400W(Insec) Physical dimensions (mm) 188.0W)×78.0(D)×30.5(H) (No projection included) Veight 250g Installation method Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6			
Analog input Input type Input ange 0 - 20mA Maximum input rating 30mA Input impedance 250Ω The number of channels Channel switching rate 3msec/ch (Max) *3 Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28 - 16 LED AI0 - AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC bullt-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Maxx), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ - V- V FG 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 *6	Counter input /	Connector	(DI_ACOM, DI0, DI1, DI2, DI3, DI_BCOM, DO0+,
Input range 0 - 20mA		Applicable wire	AWG28-16
Maximum input rating 30mA Input impedance 250Ω The number of channels Differential Input 2ch Channel switching rate 3msec/ch (Max) *3 Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (Al+, Al-, AG) Applicable wire AWG28 - 16 LED Al0 - Al1 (Yellow) Al0 - Al1 (Yellow) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ -V-, V FG AWG24 - 16 Surge protection element V+ -V-, V FG Sunge protection element N+ -V-, V FG Challed Sunge protection element N+ -V-, V FG Challed Sunge protection included) Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6	Analog input	Input type	Current Input
Input impedance 250\(\Omega\$ The number of channels Differential Input 2ch Channel switching rate 3msec/ch (Maxx) *3 Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28 - 16 LED 40 - AI1 (Yellow) Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Maxx), 24V 0.4A (Maxx) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ - V-, V FG Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surge years of longer in terminal (V+, V-, FG) Applicable wire Surger years of longer in terminal (V+, V-, FG) Applicable wire Surger years of longer years of long		Inputrange	0 - 20mA
The number of channels Differential Input 2ch Channel switching rate 3msec/ch (Max) *3 Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (Al+, Al-, AG) Applicable wire AWG28 - 16 LED AI0 - AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ -V-, V FG Installation method Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6		Maximum input rating	30mA
Channel switching rate Conversion rate The sampling interval differs by the software programmed by the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28-16 LED AI0-AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12-24VDC Input voltage range 10.8-30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24-16 Surge protection element V+ -V-, V FG AWG24-16 Surge protection element V+ -V-, V FG Physical dimensions (mm) Rated input voltage on the 35mm DIN rail, Mounting on the wall using the screws *6		Input impedance	250Ω
Conversion rate The sampling interval differs by the software programmed by the user. Data buffer Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Eus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28 - 16 LED AI0 - AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 cliode Stand off voltage: ±30V, Peak pulse power: 400W(1msec) Physical dimensions (mm) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life :10 years or longer at 25°C) RTC built-in (battery life		The number of channels	Differential Input 2ch
the user. Data buffer None Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28-16 LED AI0 - AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 cliode 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 *6		Channel switching rate	3msec/ch (Max) *3
Resolution 12bit Non-Linearity error *4 ±10LSB Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28-16 LED AI0-AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12-24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 *6		Conversion rate	
Non-Linearity error *4		Data buffer	None
Isolation/Resistance Bus Isolation /500VDC, Inter Channel Isolation /200V Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28-16 LED AI0 - AI1 (Yellow) Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 108 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 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 *6		Resolution	12bit
Connector 2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG) Applicable wire AWG28-16 LED AI0 - AI1 (Yellow) LED Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 clode 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 *6		Non-Linearity error *4	±10LSB
Applicable wire AWG28 - 16 LED AI0 - AI1 (Yellow) Power (Green)/Status 1 (Green)/Status 2 (Red) Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max.), 24V 0.4A (Max.) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ - V-, V FG 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 Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6		Isolation/Resistance	Bus Isolation /500VDC, Inter Channel Isolation /200V
LED		Connector	2-piece 3.5mm pitch 3-pin terminal (AI+, AI-, AG)
Power (Green)/Status 1 (Green)/Status 2 (Red) Switch		Applicable wire	AWG28 - 16
Switch Reset SW, Shut Down SW, Full Duplex/Half Duplex Switching SW RTC RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 *6		LED	AIO - AI1 (Yellow)
RTC built-in (battery life :10 years or longer at 25°C) Lunar inequality: ±15sec (at 25°C) Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 108 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (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 *6	LED		Power (Green)/Status 1 (Green)/Status 2 (Red)
Power supply *5 Rated input voltage 12 - 24VDC Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max), 24V 0.4A (Max) Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element V+ - V-, V FG 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 Cuick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6	Switch		
Input voltage range 10.8 - 30VDC Power consumption 12V 0.7A (Max.), 24V 0.4A (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 *6	RTC		
Power consumption 12V 0.7A (Max), 24V 0.4A (Max)	Power supply *5	Rated input voltage	12 - 24VDC
Connector 2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG) Applicable wire AWG24 - 16 Surge protection element 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 *6		Input voltage range	10.8 - 30VDC
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 *6		Power consumption	12V 0.7A (Max), 24V 0.4A (Max)
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 *6		Connector	2-piece 3.5mm pitch 3-pin terminal (V+, V-, FG)
V+-V-,V FG 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 *6		Applicable wire	AWG24 - 16
Weight 250g Installation method Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6			
Installation method Quick mounting on the 35mm DIN rail, Mounting on the wall using the screws *6	Physical dimensions (mm)		188.0(W)×78.0(D)×30.5(H) (No projection included)
using the screws *6	Weight		250g
OS Linux kernel 32	Installation method		
	OS		Linux kernel 3.2

- $^{\star}1 \quad \text{Data 0 corresponds to High level and Data 1 corresponds to Low level}.$

- *2 Response time of Opto-coupler
 *3 Switching time of Inter Channel
 *4 The non-linearity error means an error of approximately 0.07% occurs over the maximum range at -20 °C and +60 °C ambient temperature.
- *5 Use power cable within 3meters.
 *6 Commercial screws are required (fit into φ3.5 hole).

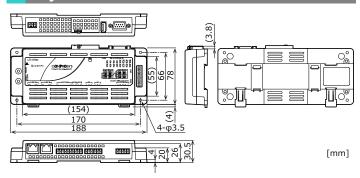
CPS-PC341MB-ADSC-9201 ■

Installation Environment Requirements

Item		CPS-PC341MB-ADSC1-9201	
Operating ambient temperature		-20-+60°C*7	
Operating ambie	nt humidity	10 - 90%RH (No condensation)	
Non-operating ambient temperature		-20 - +60°C *7	
Non-operating ar	mbient humidity	10 - 90%RH (No condensation)	
Floating dust part	icles	Not to be excessive	
Corrosive gases		None	
Line-noise resistance	Line noise	AC Line/±2kV *8 Signal Line /±1kV(IEC61000-4-4 Level 3, EN61000-4-4 Level 3)	
	Static electricity resistance	Touch/±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air/±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)	
Vibration resistance	Sweep resistance	10 - 57Hz *9 /semi-amplitude vibration 0.15mm, 57 - 150Hz/2.0G 40minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)	
Shock resistance		15G half-sine shock for 11ms in X, Y, and Z directions (JIS C 60068-2-27 -compliant, IEC 60068-2-27 -compliant)	
Grounding		Class D grounding (previous class 3 grounding), SG-FG/ non-conduction	
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UL, KC	

- f you use the USB with bus power, operate the product at between -20 and +55°C. When you use the CPS-PWD15AW12-01 (optional product).
- When you use an optional power product 10-55Hz (See the manual of optional power product for details)

Physical Dimensions



Packing List

Product [CPS-PC341MB-ADSC-9201]...1

Product Guide...1

Warranty Certificate...1

Serial Number Label...1

3-pin Connector (Power/Analog)...3

5-pin Connector (RS-422A/485)...1

10-pin Connector (Digital)...1

CODESYS Runtime license...1

(provided on the bottom face of the product)

List of Option

DIN rail fitting power supply

CPS-PWD-15AW12-01: fitting type power supply 15[w]

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

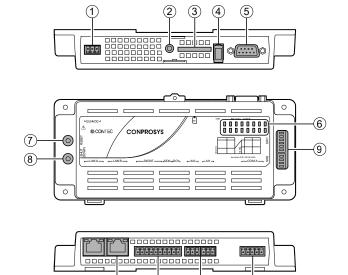
SD Card

SD-4GB-A: SD Card 4GB

Magnet

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

Component Name



		0 (1) (12) (13)
No.	Name	Function
1	Power Connector	This is a connector for power. Use the 3-pin connector included in the package.
2	Debug Connector	Do not use this.
3	SD Card Slot	This a slot for inserting SD card to store data.
4	USB Port	This is a TYPE-A USB port.
5	RS-232C Serial Port	This is a RS-232C serial port. (male)
6	LED Indicator	This indicates status of the product.
7	Reset Switch	This resets the product.
8	Shutdown Switch	This shuts down the product.
9	DIP Switch	This is used for system setup and RS-422A/485 setup.
10	LAN Port	This is a connector for LAN.
11	Digital Input/Counter Input/Digital Output Connector	This is a connector for digital input/counter input/digital output. (Use the 10-pin connector included in the package)
12	Analog Input Connector	This is a connector for analog input. (Use the 3-pin connector included in the package)
13	RS-422A/485 Connector	This is a connector for RS-422A/485 communication. (Use the 5-pin connector included in the package)

CPS-PC341MB-ADSC-9201

 $[\]ensuremath{^{\star}}\xspace$ Visit the Contec website regarding information on the optional products.