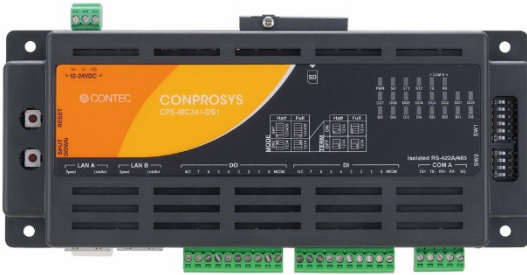


CONPROSYS Series Digital Input/Output, CAN Module CPS-MC341-DS2-111



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

Features

Measurement and Upload Features

The product measures data with an external sensor and uploads them to the Cloud server.

Web Monitoring

The product contains a Web server (Java applet). Even with your PC located remotely, you can monitor and update I/O information through a Web browser. On the monitoring screen, you can freely lay out the standard GUI parts (graphic, slider, button, etc.). All operations including monitoring layout, making relations with I/O information, can be achieved via the Web browser.

Web Task Script

You can combine and assemble icons such as arithmetic operations, conditional branching, data outputting to perform the executions or its processes like drawing them in the flowchart. All operations can be completed on the Web browser.

Message Communication Function

By working with the RS-422A/RS-485 or the Ethernet device (TCP/UDP), you can establish up to 10 connections and transmit or receive messages. Message communication can be accomplished from Web task script.

Compact Design

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

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.

Ethernet Hub Function within

Use the product as Ethernet Hub so that you can connect devices in the daisy-chain.

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 input/output, CAN)

Electrical isolation between the RS-422A/485 and the CPU, between the digital input/output and CPU, as well as between CAN and CPU can block up the 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.

The product is an IoT/M2M controller with isolated CAN, isolated RS-422/485, isolated digital input/output, LAN interface, and Ethernet Hub.

It is equipped with the ARM® Cortex®-A8 processor (600MHz) and the 512MB DDR3-SDRAM system memory. On-board NOR-FLASH is utilized for a booting device.

You can perform all processes on a web browser from the development to the operation. The functions such as Web monitoring of I/O information, alarm processing by I/O information, task divergence enable you to create a Cloud System at low cost and in a short time.

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.

Installation easy with two pieces of terminal supports and DIN rail

You can install and remove a terminal connector without a screwdriver so that it can shorten the time of the replacement. As the product can be mounted on the DIN rail, removing and replacing are easy as well.

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.

Electrolytic capacitor and primary battery unused

Because the product is not used an electrolytic capacitor and a primary battery which are short-life components, it is a long life.

Packing List

Product [CPS-MC341-DS2-111] ...1
Product Guide ... 1
Warranty Certificate ...1
Serial number Label ...1
3-pin Connector (Power) ...1
5-pin Connector (RS-422A/485) ...1
10-pin Connector (Digital) ...2

Specification

Function specification

Item		CPS-MC341-DS2-111
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)
	The number of channels	1
	Isolation/Voltage Resistance	Bus Isolation/500VDC
	Baud Rate	300bps - 115.2kbps
	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: $\pm 13V$, Peak pulse power: 400W(1ms)
	Surge protection element SG - FG	Gas discharge tube arrester Discharge voltage: $\pm 300V$, impulse current tolerance: 2000A (8/20 μs , 10 times)
SD Card slot	Standard	SD standard follow
	Connector	SD memory card slot
	LED	Read/Write (Yellow)
CAN	CAN specification	CAN2.0A/B
	Speed	1Mbps
	Isolation /Voltage Resistance	Isolation
	The number of channels	1
	Connector	9-pin D-SUB connector (Male)
Digital Input	LED	CAN A(Yellow)
	Input type	Non-voltage input (negative logic) *1
	Isolation / Voltage Resistance	Optocoupler isolation /1000V
	Open circuit impedance	10k Ω and more
	Short circuit impedance	500 Ω or less
	Input Resistance	3.3k Ω
	The number of channels	8
	LED	DI0 - DI7(yellow)
	Connector	2-piece 3.5mm pitch 10-pin terminal (MCOM, DI0, DI1, DI2, DI3 DI4, DI5, DI6, DI7, N.C)
	Applicable wire	AWG28 - 16
Digital Output	Output type	Open collector output (Current sink type) (negative logic *1)
	Isolation /Voltage Resistance	Optocoupler Isolation/1000V
	Maximum Output Voltage Resistance/ Current	24V/100mA
	Residual Voltage with Output ON	0.5V or less (Output current $\leq 50mA$), 1.0V or less (Output current $\leq 100mA$)
	The number of channels	8
	LED	DO0 - DO7(Yellow)
	Connector	2-pieces 3.5mm pitch 10-pin-pin terminal (MCOM, DO0, DO1, DO2, DO3 DO4, DO5, DO6, DO7, N.C)
	Applicable wire	AWG28 - 16
	LED	Power(Green) / Status 1(Green)/Status 2(Red)
	Switch	Reset SW, Shutdown SW, Switching for Full Duplex/Half Duplex
RTC		RTC built-in (battery not equipped)
Power supply *2	Rated input voltage	12 - 24VDC
	Input voltage range	10.8 - 30VDC
	Power consumption	12V 0.6A (Max), 24V 0.3A (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: $\pm 30V$, Peak pulse power: 400W (1ms)
Physical dimensions (mm)		188.0(W) \times 78.0(D) \times 30.5(H) (not include projection)
Weight		280g
Installation method		Quick mounting to the 35mm DIN rail Mounting onto the wall with the screws*3
OS		Linux kernel 3.2

*1 Data "0" and "1" correspond to the High and Low levels, respectively.

*2 Use power cable within 3meters.

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

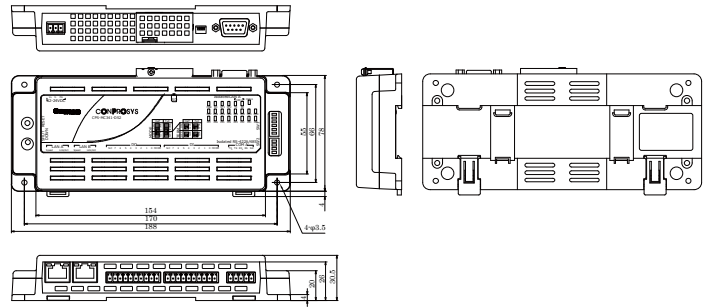
Installation Environment Requirements

Item		CPS-MC341-DS2-111
Operating ambient temperature		-20 to +60°C
Operating ambient humidity		10 to 90%RH(No condensation)
Non-operating ambient temperature		-20 to +60°C
Non-operating ambient humidity		10 to 90%RH(No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC Line: $\pm 2kV$ *4 Signal Line: $\pm 1kV$ (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Touch: $\pm 4kV$ (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air: $\pm 8kV$ (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
	Sweep resistance	10 - 57Hz*5 / 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)
Impact resistance		15G half-sine shock for 11ms in X, Y, and Z directions JIS C60068-2-27-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)

*4 When you use the CPS-PWD-15AW12-01 (optional product)

*5 With the optional DIN rail fitting power supply, 10-55Hz (for details, see the user's guide of the optional power supply)

Physical Dimensions



Support Software & Service

Cloud-based remote monitoring service "CONPROSYS cloud Data Service"

Monitoring in the on-premises environment "CONPROSYS data collection software"

Driver software that strengthens the collaboration with devices. "OPC Server Software"

High-performance HMI software "ACTIVE TOUCH"

List of Option

DIN rail mounting power supply

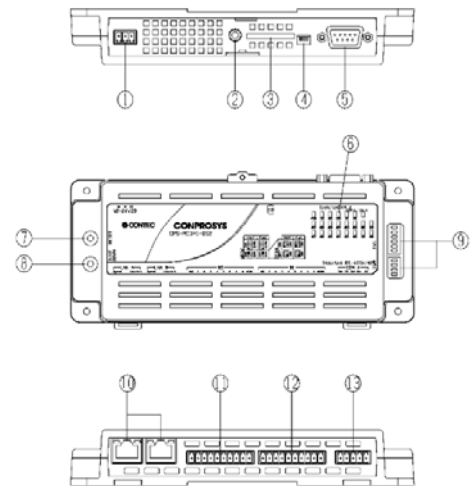
CPS-PWD-15AW12-01: DIN rail mounting power supply 15[w]
(Input: 100 - 240VAC, output 12VDC 1.3 A)

SD card

SD-2GB-B: SD card 2GB

* Information about the option products, see the Contec's website.

Component Name



1. Power Connector: Use the 3-pin connector; included in this package.
2. Debug Connector: Please do not use it.
3. SD Card Slot: It is for data storage.
4. CAN DIP Switch: Used for CAN setting.
5. CAN: CAN port (male).
6. LED: It indicates the status of this product.
7. Reset Switch: This resets the product.
8. Shutdown Switch: This shuts down the product.
9. DIP Switch: Used for System setup and RS422A/485 setup.
10. LAN: It is a connector for LAN.
11. Digital output (DO): Use the 10-pin Connector; included in this package.
12. Digital input (DI): Use the 10-pin Connector; included in this package.
13. RS-422A/485: Use the 5-pin Connector; included in this package.