

CONPROSYS Series
Configurable Type Sensor Module
CPS-SSI-4P



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

Features

Platinum resistance thermometer compliant with IEC/JIS standard

You can use the platinum resistance thermometer (Pt100, JPt100) that is comply with IEC/JIS standard, allowing connection with the platinum resistance thermometer through Three-wire or Four-wire.

Compact design

Compact design, 25.2 (W)×94.7(D)×124.8 (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.

Installation easy with two pieces of terminal support 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 not only mounted on DIN rail, but also is removable along the side rails, replacing is simple and 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.

No electrolytic capacitor battery

No electrolytic capacitor is used. The Contec is creating the product with a longer life.

This product is a configurable module to collect temperature data with a platinum resistance thermometer of Pt100, and operates along with the CPU module configurable type controller of our CONPROSYS series.

Temperature of up to four channels can be measured by one module.

- * 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 July, 2022.

Specification

Function specification

Item	CPS-SSI-4P	
The number of channels	4	
Platinum resistance thermometer acceptable	Pt100 (JIS C1604-1997, IEC 751 1983)	
Wiring method	Three-wire or Four-wire	
Maximum input voltage	4.5V	
Measurable temperature range	-200 - +800°C	
Precision	Three-wire	±0.3°C *1
	Four-wire	±0.15°C *1
Resolution	0.01°C	
Conversion speed	170msec per one channel *2	
Isolation method	Between platinum resistance thermometer input and power supply : Bus Isolation Voltage Resistance 500VDC Between platinum resistance thermometer input channels : non-isolated	
Applicable wire	AWG28 - 16	
LED	Status (Green, Red)	
External circuit power supply	24VDC (±10%)	
Current consumption	0.1A (Max.)	
Physical dimensions (mm)	25.2(W)×94.7(D)×124.8(H) (No projection included)	
Weight	200g	
Installation method	Quick mounting on the 35mm DIN rail	

- *1 This indicates when ambient temperature is 25°C. See below for precision in other ambient temperatures.
Three-wire : ±0.60°C (-20°C - 0°C), ±0.45°C (0°C - 60°C)
Four-wire : ±0.35°C (-20°C - 0°C), ±0.25°C (0°C - 60°C)
- *2 The speed indicates conversion time only, not includes communication time.

Caution

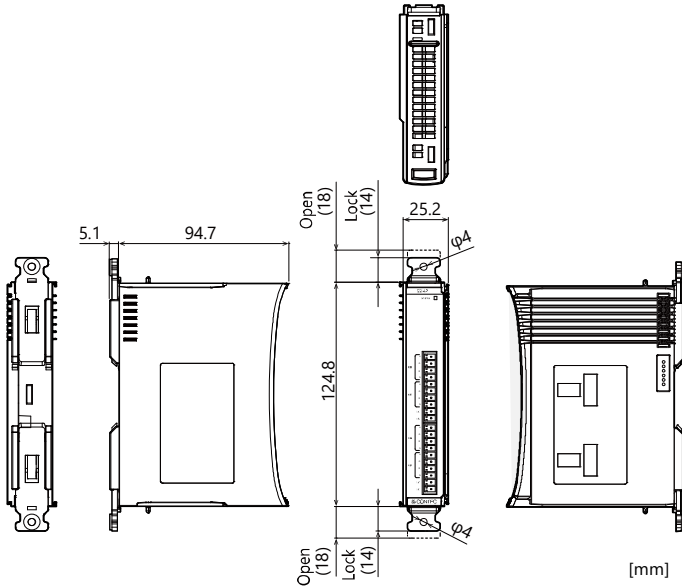
The maximum number of stacking modules operating along with the stack type controller is 16 and the total current consumption of the modules should be less than 3.3A.

Installation Environment Requirements

Item		CPS-SSI-4P
Operating ambient temperature		-20 - +60°C
Operating ambient humidity		10 - 90%RH (No condensation)
Non-operating ambient temperature		-20 - +60°C
Non-operating ambient humidity		10 - 90%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	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 *3 /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)
Standard		VCCI Class A, FCC Class A CE Marking (EMC Directive Class A, RoHS Directive), UKCA, UL/c-UL

*3 With the optional DIN rail fitting power supply : 10 - 55Hz (See the manual of optional power product for details)

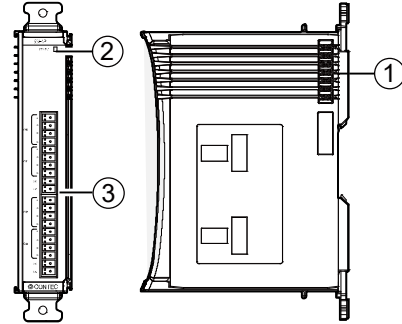
Physical Dimensions



Packing List

- Product [CPS-SSI-4P] ...1
- Product guide ... 1
- Warranty Certificate ...1
- Serial Number Label ...1
- 10-pin Connector ...2

Nomenclature of Components



No.	Name	Function
1	Stack Bus	Used for power supply and communication with the configurable type module.
2	LED Indicator	This indicates status of the product.
3	Temperature Sensor Input Connector	Connector for temperature measurement. Use the 10-pin connector, included in this package.

List of Option

Configurable Type Controller

- CPS-MCS341-DS1-111 Configurable Type CPU module
- CPS-MCS341-DS1-131 Configurable Type CPU module + OPC UA server + MTConnect
- CPS-MCS341G-DS1-130 Configurable Type CPU module +3GWAN
- CPS-MCS341Q-DS1-131 Configurable Type CPU module +920MHz LAN
- CPS-ECS341-1-011 Ether CAT Slave Module

DIN rail mounting power supply

- CPS-PWD-90AW24-01 DIN rail mounting power supply 90[w]
(Input: 100 - 240VAC, output: 24VDC 3.8 A)
- CPS-PWD-30AW24-01 DIN rail mounting power supply 30[w]
Input: 100 - 240VAC, output: 24VDC 1.3 A)