## PLC

☐ HMI

SENSOR



ENCODER

COUNTER

INFORMATION

Common Subject Matter

SJ-ETHER/SJ

DL05/06

DL205

D4

D3

Programmer

KPP

DirectSOFT

Terminator I/O

Features

Specifications

Dimensions

Specifications

Power Supply Module

Input/Output

Analog Module

# SJ-ETHER/SJ Series

## **Analog Module**

# RTD Input Module (4 Channels)

C0-04RTD



#### **General Specifications**

Items	Specifications
Field to Logic Side Isolation	No isolation
External DC Power Required	None
Bus Power Required (24 V DC)	25 mA
Thermal Dissipation	2.047 BTU/hour
Terminal Block Replacement	ADC p/n C0-16TB
Weight	86 g

#### Input Specifications

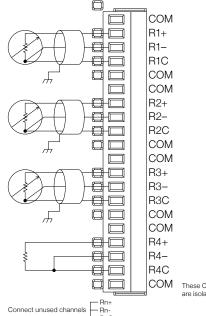
Items	Specifications		
Number of Channels	4		
Common Mode Signal Range	±2.5 V		
Common Mode Rejection	100 dB at DC and 100 dB at 50/60 Hz		
Input Impedance	> 5 ΜΩ		
Absolute Maximum Rating	Failure-resistant input to ±50 V DC		
Display Resolution	$\pm 0.1^{\circ}\text{C}$ or $^{\circ}\text{F}$ , $0.1\Omega$ or $0.01~\Omega$		
Input Range*	$\begin{array}{lll} \text{Pt100 Type:} & -200.0^{\circ}\text{C to } 850.0^{\circ}\text{C}, \\ & (-328^{\circ}\text{F to } 1,562^{\circ}\text{F}) \\ \text{Pt1000 Type:} & -200.0^{\circ}\text{C to } 595.0^{\circ}\text{C}, \\ & (-328^{\circ}\text{F to } 1,103^{\circ}\text{F}) \\ \text{jPt100 Type:} & -100^{\circ}\text{C to } 450^{\circ}\text{C } (-148^{\circ}\text{F to } 842^{\circ}\text{F}) \\ 10 \ \Omega \ \text{Cu:} & -200^{\circ}\text{C to } 260^{\circ}\text{C } (-328^{\circ}\text{F to } 500^{\circ}\text{F}) \\ 25 \ \Omega \ \text{Cu:} & -200^{\circ}\text{C to } 260^{\circ}\text{C } (-328^{\circ}\text{F to } 500^{\circ}\text{F}) \\ 120 \ \Omega \ \text{Ni:} & -80^{\circ}\text{C to } 260^{\circ}\text{C } (-112^{\circ}\text{F to } 500^{\circ}\text{F}) \\ 0 \ \text{to } 3,125.0 \ \Omega \ \text{Resolution } 0.1 \ \Omega \\ 0 \ \text{to } 781.2 \ \Omega \ \text{Resolution } 0.1 \ \Omega \\ 0 \ \text{to } 390.62 \ \Omega \ \text{Resolution } 0.1 \ \Omega \\ 0 \ \text{to } 195.31 \ \Omega \ \text{Resolution } 0.01 \ \Omega \\ \end{array}$		
RTD Linearization	Automatic		
Excitation Current (All Ranges)	210 μA		
Accuracy Against Temperature	Maximum ±10 ppm/°C		
RTD Input Maximum Inaccuracy	±3°C (Excluding RTD error); ±5°C (Ranges Cu10 and Cu25)		
RTD Linearity Error (End-to-end)	±2°C maximum, ±0.5°C typical, monotonic with no missing codes		
Resistance Input Maximum Zero Scale Error	±0.0015% of full scale range in ohms (Negligible)		
Resistance Input Maximum Full Scale Error	±0.02% of full scale range		
Maximum Linearity Error	±0.015% of full scale range maximum at 25°C, monotonic with no missing codes		
Resistance Maximum Input Inaccuracy	0.1% at 0°C to 60°C (32°F to 140°F), typical 0.04% at 25°C (77°F)		
Warm Up Time	30 minutes for ±1°C repeatability		
Sample Duration Time	240 ms		
All Channel Update Rate	Single channel update rate times the number of enabled channels on the module		
Open Circuit Detection Time	Positive full-scale reading within 2 seconds		
Conversion Method	Sigma - Delta		

 $<sup>^{\</sup>star}$  While it is possible to use different resistive ranges, we recommend using the narrowest range that covers the resistance being measured. For example, if measuring approximately 100  $\Omega$  resistance, use the 0 to 195.31  $\Omega$  range. While the resolution is the same as the 0 to 390.62  $\Omega$  range, output RMS noise will be lower and stability will be improved.

#### **Initialization Time**

The Number of Channels Used	The same Input Type is selected for all Channels	Mixed Input Types are selected
1	4 sec	N/A
2	5 sec	May take up to 13 sec
3	6 sec	May take up to 18 sec
4	7 sec	May take up to 24 sec

### Wiring Diagram



These COM terminals are isolated.

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