SJ-ETHER/SJ Series
Analog Module

■Temperature Input Module《4 Channels》

C0-04THM

General Specifications

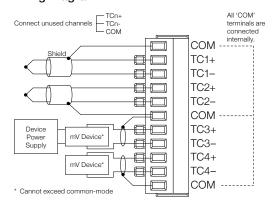| Items	Specifications
Field to Logic Side Isolation	1,800 V AC applied for 1 second (100% tested)
External DC Power Required	None
Bus Power Required (24 V DC)	25 mA
Thermal Dissipation	0.175 BTU/hour
Terminal Block Replacement	ADC p/n C0-8TB
Weight	86 g

Input Specifications

Items	Specifications
Number of Channels	4
Common Mode Signal Range	-1.3 to +3.8 V
Common Mode Rejection	100 dB at DC and 130 dB at 60 Hz
Input Impedance	> 5 MΩ
Absolute Maximum Rating	Failure-resistant input to ±50 V DC
Display Resolution	±0.1°C or °F, 16 bit
Input Range*	Type J: -190°C to 760°C (-310°F to 1,400°F) Type K: -150°C to 1,372°C (-238°F to 2,502°F) Type E: -210°C to 1,000°C (-346°F to 1,832°F) Type R: 65°C to 1,768°C (149°F to 3,214°F) Type S: 65°C to 1,768°C (149°F to 3,214°F) Type T: -230°C to 400°C (-382°F to 752°F) Type B: 529°C to 1,820°C (984°F to 3,308°F) Type N: -70°C to 1,300°C (-94°F to 2,372°F) Type C: 65°C to 2,320°C (149°F to 4,208°F) 0 to 39.0625 mV ±39.0625 mV ±78.125 mV 0 to 156.25 mV ±156.25 mV 0 to 1.25 V
Cold Junction Compensation	Automatic
Thermocouple Linearization	Automatic
Accuracy Against Temperature	Maximum ±25 ppm/°C
Linearity Error	±2°C maximum, ±1°C typical, monotonic with no missing codes
Maximum Inaccuracy	±3°C maximum (Excluding thermocouple error)
Maximum Voltage Input Offset Error	0.05% at 0°C to 55°C (32°F to 131°F), typical 0.04% at 25°C (77°F)
Maximum Voltage Input Gain Error	0.06% at 25°C (77°F)
Maximum Voltage Input Linearity Error	0.05% at 0°C to 55°C (32°F to 131°F), typical 0.03% at 25°C (77°F)
Maximum Voltage Input Inaccuracy	0.1% at 0°C to 55°C (32°F to 131°F), typical 0.04% at 25°C (77°F)
Warm Up Time	30 minutes for ±1°C repeatability
Sample Duration Time	400 ms
All Channel Update Rate	Single channel update rate times the number of enabled channels on the module
Open Circuit Detection Time	Open Circuit Detection Time Burn Out flag set and zero scale reading within 3 seconds
Conversion Method	Sigma - Delta

Initialization Time

The Number of Channels Used	With any Configuration
1	5 sec
2	7 sec
3	9 sec
4	11 sec

Wiring Diagram

Connect unused channels TCn+ TCn- COM

All 'COM' terminals are connected internally.

Shield

Device Power Supply

mV Device*

mV Device*

COM
TC1+
TC1–
TC2+
TC2–
COM
TC3+
TC3–
TC4+
TC4–
COM

* Cannot exceed common-mode