

Thermocouple module



Features

- Insulation between channels
- $\pm 0.1\%$ (25°C) constant density
- Supports various input sensor (supporting C-type sensor)
- Various additional functions (average, filter, alarm, max/min value display)
- Special module parameter setting and monitoring with XG5000

Specifications

Item	XGF-TC4S	
Input channels	4 channels	
Input sensor type	K, J, E, T, B, R, S, N, C	JIS C1602-1995ITS-90
Input temperature range	K	-250 ~ 1350°C
	J	-200 ~ 1200°C
	E	-250 ~ 1000°C
	T	-250 ~ 400°C
	B	400 ~ 1800°C
	R	-50 ~ 1750°C
	S	-50 ~ 1750°C
	N	-270 ~ 1300°C
Digital output	Temperature display (unit: 0.1)	Display down to the first decimal place (0.1°C)
	Scaling (User range setting)	0 ~ 65535 -32768 ~ 32767
	Accuracy	$\pm 0.1\%$ Some section can permit 0.5%
Accuracy	Normal temp. (25°C)	$\pm 0.1\%$
	Temperature coefficient (Operating temp. range)	$\pm 100\text{ppm}^\circ\text{C}$
Conversion speed	40ms/ channel	
Insulation	Between channels Insulation	
	Between terminals and power	Insulation(Photo-Coupler)
Compensation	Automatic compensation by RJC sensing (PT100)	
	Compensation degree	$\pm 1.0\%$
Function	Average	Average time (320 ~ 6400ms)
		Average number (2 ~ 64000)
		Average move (2 ~ 100)
	Alarm	Process Alarm
		Change rate alarm
Filter	Burn-out detection	
Max./Min. values display	Digital filter (160 ~ 64000ms)	
Terminal block	18-point terminal block	
Current consumption	5V : 610mA	
Weight (kg)	0.150	

Input wiring

terminal block for compensating wire extension

- 1) When sensor and compensating wire are shielded, shield connection to FG terminal is available.
- 2) To minimize an error, overall temperature of block terminal need to be equal.
- 3) Compensating sensor should be the same type of sensor which is used for measurement.

Characteristics of I/O conversion

