HD-5922 Dual Channel Thermocouple Input Safety Barrier

The temperature type input safety barrier converts the thermocouple in the danger zone into a current signal and outputs it to the safety zone. It has a cold junction compensation function. This product requires independent power supply, and the three terminals of input, output and power are isolated. With online fault self-diagnosis function, you can configure the temperature range and signal type, and the output mode when the signal is faulty through the PC or handheld programmer.

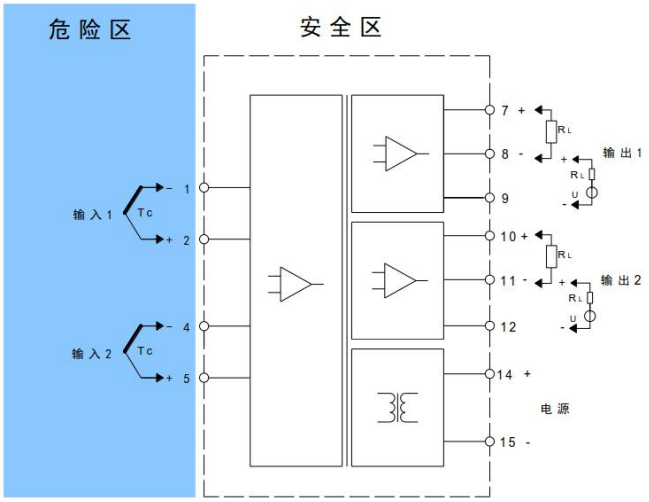
Technical Parameter	
Power supply	18V DC~32V DC Power reverse protection
Working power	≤1.3W (24V, dual road, full load output)
Input signal	K, E, S, B, J, T, R, N and other thermocouples
Output signal	Active / Passive Output: 4-20mA
Allowable load	Active: RL≤550Ω Passive: RL≤ [(U-3) /0.02] Ω; U is the loop supply voltage 12 ~ 30V
Conversion accuracy	(25 ℃ ± 2 ℃, excluding cold junction compensation):
Input signal type	Measuring range / Accuracy
K/E/J/N	< 300℃ ±0.3℃ ≥300℃ ±0.1%F.S
S/B/T/R/WRE-Series	< 500℃ ±0.5℃ ≥500℃ ±0.1%F.S
Compensation accuracy	1 ℃ (Compensation temperature range: -20 ℃ ~ + 60 ℃)
Temperature drift	40ppm/℃
Response time	≤500ms
Electromagnetic Compatibility	IEC 61326-3-1
Dielectric strength	≥2500V AC (intrinsically safe and non-intrinsically safe) ≥1500V AC (between non-intrinsically safe ends)
Insulation resistance	≥100MΩ (between input / output / power)
Range of working temperature	-20℃ ~ +60℃
Standard sizes	Width 17.7mm * Height 110mm x Depth 118.9mm
Panel description	PWR: green power indication, ALM: red fault indication
Output status	If the user does not specify, no matter what kind of fault state the input signal has, the output will follow the input signal change within the full-scale range (except for disconnection, disconnected output 0V / mA), but the maximum does not exceed the output range 110% (such as 0mA ~ 20mA output, the minimum output can be 0mA, the maximum does not exceed 22mA)
Application	Installed in safe area, can connect to zone 0, zone 1, zone 2; IIA, IIB, IIC; intrinsically safe equipment in T4 ~ T6 danger zone

Explosion-proof Parameters:

Explosion-proof Parameters:

National Instrumentation and Explosion-proof Safety Supervision and Inspection Station (NEPSI) Certification
Explosion-proof mark: [Ex ia Ga] IIC
Port voltage (Um): 250V
Certification parameters (between 1, 2 terminals, between 4, 5 terminals):
Uo = 8.61V, Io = 1mA, Po = 3mW
IIC: Co = 3.8μF, Lo = 700mH
II B: Co = 35μF, Lo = 700mH

Wiring Diagram



Selection Table				
HD-5922	X	X	X	X
Input				Thermocouple
Output			1	4~20mA
			2	1~5V
			4	0~5V
			6	0~10V
			S	Other
Power				18VDC~32VDC
Note: The space represents the default, you do not need to select it.				

Selection example: HD 5922-XXX

HD-5922, two input two output, input thermocouple, output 4-20mA, 18VDC ~ 32VDC power supply.