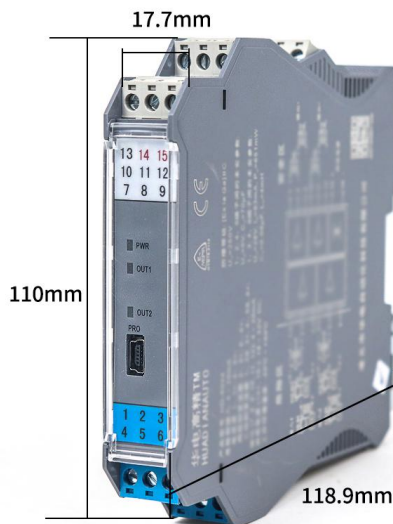


HD-5921 Dual Channel Thermal Resistance Input Safety Barrier

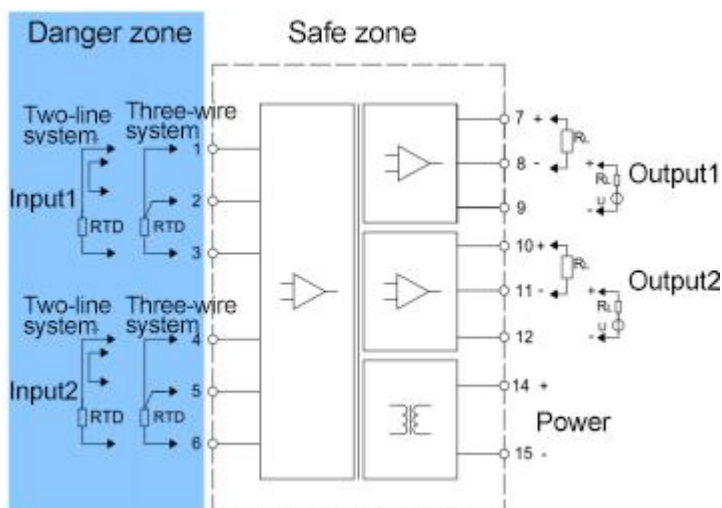
The temperature-type input safety barrier converts the thermal resistance in the danger zone into a current signal and outputs it to the safety zone. This product requires independent power supply, and the three terminals of input, output and power are isolated. With online fault self-diagnosis function, 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 Parameters	
Power supply	18V DC~32V DC power supply reverse protection
Working power consumption	≤1.3W (24V, dual full-load output)
Input signal	Pt100, Cu100, Cu50, BA2, etc. Thermal resistance
Output signal	Active / passive output: 4-20mA
Allowable load	Active: $RL \leq 550\Omega$
	Passive: $RL \leq [(U-3) / 0.02] \Omega$; U is the loop supply voltage 12 ~ 30V
Lead resistance	≤20Ω / line (thermal resistance)
Conversion accuracy	0.1%F.S (25°C ± 2°C)
Temperature drift	40ppm/°C
Response time	≤500ms
Electromagnetic compatibility	IEC 61326-3-1
Dielectric strength	≥2500V AC (intrinsically safe and non-intrinsically safe)
	≥1500V AC (non-intrinsically safe)
Insulation resistance	≥100MΩ (between input / output / power)
Operating temperature range	-20°C ~ +60°C
Dimensions	17.7mm wide 110mm high 118.9mm deep
Panel description	PWR: green power indication, ALM: red fault indication
Output status	In the case that the user does not specifically indicate, no matter what kind of fault status of the input signal, 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% of the upper limit (such as 0mA ~ 20mA output, the minimum output can be 0mA, the maximum does not exceed 22mA)
Application site	Installed in the safe area, can be connected to zone 0, zone 1, zone 2; IIA, IIB, IIC; intrinsically safe equipment in T4 ~ T6 danger zone



Wiring diagram



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
 Authentication parameters (between terminals 1 and 2):
 $U_0 = 8.61V$, $I_0 = 30mA$, $P_0 = 65mW$
 IIC: $C_0 = 3.8\mu F$, $L_0 = 25mH$
 IIB: $C_0 = 35\mu F$, $L_0 = 75mH$
 IIA: $C_0 = 700\mu F$, $L_0 = 200mH$

Product model list				
HD-5921		X	X	X
Input signal			Thermal resistance	
Output signal		1	4~20mA	
		2	1~5V	
		4	0~5V	
		6	0~10V	
		S	Others	
Power supply			18VDC~32VDC default	

Eg: HD5921-XXX

HD-5921, 2 in 2 out, Input Thermal resistance, Output 4-20mA, 18VDC~32VDC power supply.