Dual-channel current input safety barrier

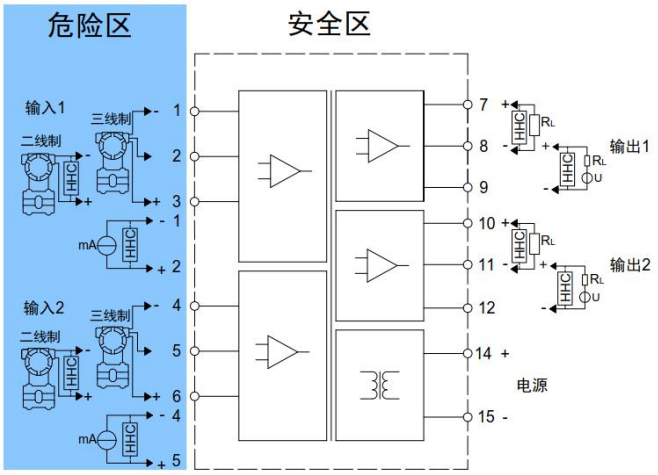
The current detection end safety barrier provides isolated power to the 2-wire and 3-wire transmitters in the hazardous area and detects the current signal output by the transmitter. The isolated current or voltage signal is output to the safe area and supports HART. Digital signals are transmitted in both directions. This product requires independent power supply, and the three terminals of input, output and power are isolated.

Technical Parameters	
Power supply	18V DC ~ 32V DC power reverse protection
Working power	≤2.5W (24V, dual, full load output)
Input signal	4-20mA, HART digital signal
input resistance	About 75Ω
Distribution voltage	Open circuit voltage ≤ 26V, output voltage ≥ 15.5V at 20mA
output signal	Active / passive output: 4 ~ 20mA, HART digital signal
Allowable load	Active: RL≤550Ω Passive: RL <[(U-3) /0.02] Ω; U is the loop power supply voltage 12 ~ 30V
Conversion accuracy	0.1%F.S (25℃±2℃)
Temperature drift	40ppm/℃
Response time	≤2ms
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* Depth 118.9mm
Panel description	PWR: Green power indicator
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:

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 = 5V,
IIC: Co = 3.8μF, Lo = 999mH
II B: Co = 35μF, Lo = 999mH
II A: Co = 700μF, Lo = 999mH
Authentication parameters (between 1, 3 and 4, 6 terminals):
Uo = 27.3V, Io = 92mA, Po = 628mW
II C: Co = 0.08μF, Lo = 4.2mH
II B: Co = 0.683μF, Lo = 12.6mH
II A: Co = 2.28μF, Lo = 33.6mH

Wiring Diagram



Selection Table				
HD-5044	X	X	X	X
Input				4~20mA
		2		0~20mA
		S		Other
Output				4~20mA
			2	0~20mA
			4	1~5V
			6	0~10V
			S	Other
Power				DC 24V

Selection Example: HD504X-XXX

HD-5044, two input two output, input 4-20mA, output 4-20mA, 18VDC ~ 32VDC power supply.