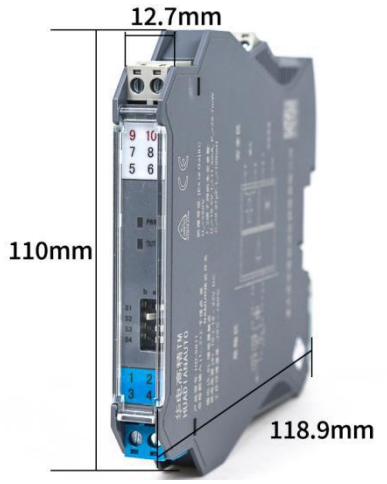
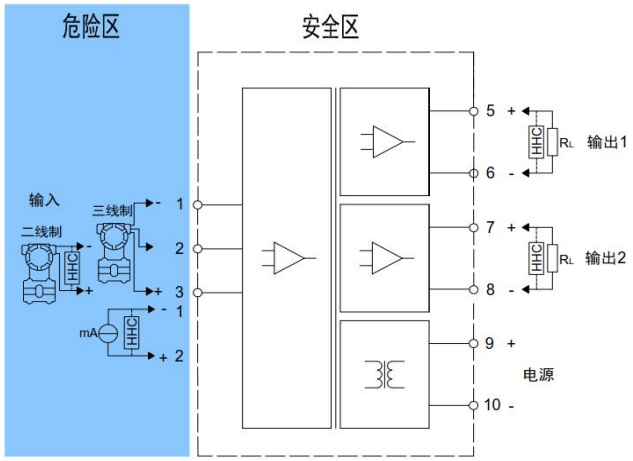
Single-channel current input safety barrier

The current detection end safety barrier will provide 2-wire and 3-limit transmitters in the hazardous area to provide isolated power. Colleagues can detect the current signals output by the transmitter, and send the current or voltage signals to the safe area through isolation. At the same time, it supports HART familiar signals Two-way transmission. 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	≤1.3W (24V, single full load output) ≤1.8W (24V, dual full-load output)
Input signal	4-20mA, HART digital signal
Input resistance	75Ω
Distribution voltage	Open circuit voltage ≤ 26V, output voltage ≥ 16V at 20mA
Output signal	4-20mA, HART digital signal
Allowable load	RL≤550Ω
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℃
Dimension	Width 12.7mm * Height 110mm x 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

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):
Uo = 5V
II C: Co = 70μF,
II B: Co = 700μF,
II A: Co = 700μF,
Authentication parameters (between terminals 1 and 3):
Uo = 28V, Io = 93mA, Po = 651mW
II C: Co = 0.08μF, Lo = 4mH
II B: Co = 0.68μF, Lo = 12mH
II A: Co = 2.27μF, Lo = 32mH

Selection Table				
HD-504	X	X	X	X
Channel	1			One in one out
	3			One in two out
Input signal				4~20mA
		2		0~20mA
		S		Other
Output signal				4~20mA
			2	0~20mA
			4	1~5V
			6	0~10V
			S	Other
Power				DC 24V

Selection example: HD504X-XXX

HD-5041, one in and one out, input 4-20mA, output 4-20mA, 18VDC ~ 32VDC power supply.