

1 input 1 output: GS8547-EX

2-wire HART transmitter, 3-wire transmitter, current source input isolated barrier, provide isolated power supplies for transmitters which located in hazardous area. Transfer 4~20mA signal(or current source signal) which generated by the transmitter from hazardous area to safe area separately, also allows bi-directional transmission of HART communication signals. The product should be supplied power independently. Input, output and power are each galvanically isolated.

Specification

Suitable location: Mounting in safe area, be connected with IS apparatus in Zone 0/1/2, II C/ II B/ II A, T4~T6 hazardous area.

Supply voltage: 20~35V DC

Current consumption: $\leq 65\text{mA}$ (at 24V supply, 20mA output)

Safe-area output:

Current: 0/4~20mA, HART digital signal

Load resistance: $R_L \leq 550\ \Omega$

Load resistance: $R_L \geq 250\ \Omega$ (HART)

Voltage: 0/1~5V

Load resistance: $R_L \geq 300\text{k}\Omega$

Note: Users can specify current output or voltage output when ordering.

Hazardous-area input:

Signal: 0/4~20mA, HART digital signal

Available voltage: Open circuit voltage: $\leq 28\text{V}$

Voltage: $\geq 15.5\text{V}$ at 20mA

Normal working current: $\leq 25\text{mA}$

Transfer accuracy: 0.1%F.S.

Temperature drift: 0.005%F.S./ $^{\circ}\text{C}$

Response time: Reach 90% of final value in 2ms

Power supply protection: Protect the barrier from reverse supply voltage destroy

Electromagnetic compatibility:

According to IEC 61326-1(GB/T 18268), IEC 61326-3-1

Ambient temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

Dielectric strength:

Between non-intrinsically safe part and intrinsically safe part $\geq 2500\text{V AC}$

Between power supply part and non-intrinsically safe part $\geq 500\text{V AC}$

Insulation resistance:

Between non-intrinsically safe part and intrinsically safe part $\geq 100\text{M}\Omega$

Between power supply part and non-intrinsically safe part $\geq 100\text{M}\Omega$

Enclosure structure: GS8500 series structure customized by Germany Phoenix Contact

Weight: Approx. 110g

Suitable IS apparatus: 2-wire HART transmitter, 3-wire transmitter, current source

SIL3
IEC61508



CCS



Dimensions: 118.9mm × 106.0mm × 12.5mm



EX certificate
By NEPSI



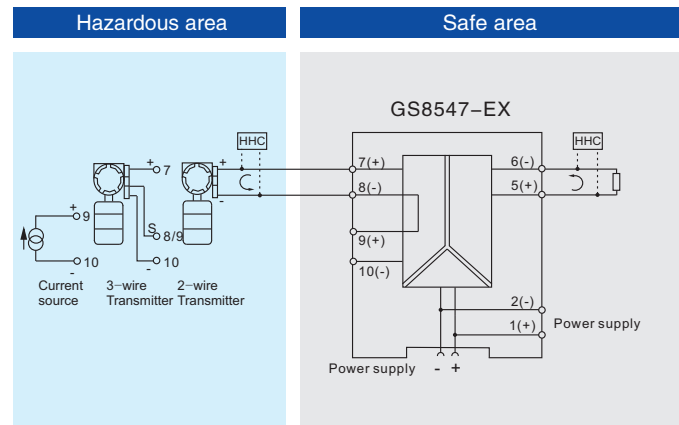
IECEx certificate
By CQM



ATEX certificate
By DNV



Application



Note: 1. It is not allowed to use HHC (HART hand-held communicator) in hazardous area and safe area at the same time;

2. HHC (HART hand-held communicator) used in hazardous area must have EX certification;

3. Bus-powered function is optional, if necessary please specified when ordering, and purchase bus power supply module in additional.

Certificates

① DNV 11 ATEX 08691X
0575 II(1)G[Ex ia Ga] II C $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

② Functional Safety(SIL): SIL3 conforms to IEC61508

③ National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation(NEPSI)

Ex marking: [EX ia Ga] II C

Maximum voltage: $U_m=250\text{V}$

Intrinsic safety parameter(7/8/9/10 terminals):

U₀=28V, I₀=93mA, P₀=651mW

II C: C₀=0.083 μF , L₀=4.2mH

II B: C₀=0.65 μF , L₀=12.6mH

II A: C₀=2.15 μF , L₀=33.6mH