Isolated Barrier
AM1011EX
GYB15.1144

Caution
- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technic support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Isolated barrier should be located in the safe area;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

Summary
Digital signal input isolated barrier can transfer the switch or proximity switch signal from hazardous area to safety area. This device has selectable line fault detect (LFD) indicating function and each channel of it can be setting output & input in-phase or reverse phase control mode. It need independent power supply. The power part, the input part and the output part are isolated from each other.

Specification
Number of channels: 1
Supply voltage: 20~35V DC
Current consumption: (at 24Vdc supply, 20mA output) < 30mA
Safe area output relay signal:
Response time: < 10ms
Drive ability: 250V AC, 2A or 30V DC, 2A
Load type: resistive load
Hazardous-area input:
Input signal: switch, proximity detector
Open circuit voltage: about 8V
Short circuit current: about 8mA
Input/Output Characteristics:
Switch closed/Input loop-current: > 2.1mA, output relay is energized yellow LED ON.
Switch open/Input loop-current: < 1.2mA, output relay is de-energized yellow LED OFF.
Function of the switch setting:

<table>
<thead>
<tr>
<th>Sta.</th>
<th>K1</th>
<th>K2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Reverse</td>
<td>LFD enable</td>
</tr>
<tr>
<td>OFF</td>
<td>In-phase</td>
<td>LFD disable</td>
</tr>
</tbody>
</table>

Note: Switch (I), K2 must be set to OFF state, no line fault (breakage, short circuit) detection; When using line fault (breakage, short circuit) detection function, resistors must be fitted, 22K±1 in parallel with switch, 680Ω in series with switch, see Switch (II), K2 set to ON state.

Power supply protection: Protect the barrier form reverse supply voltage destroy
Electromagnetic compatibility: According to IEC 61326-1 (GBT 18268)
Dielectric strength:
Between non-intrinsically safe part and intrinsically safe part: 2500VAC
Between power supply part and non-intrinsically safe part: 500VAC
Insulation resistance:
Between non-intrinsically safe part and intrinsically safe part: > 100MΩ
Between power supply part and non-intrinsically safe part: > 100MΩ
Weight: Approx. 100g
Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.
Suitable IS apparatus:
Compliance with DIN19234 of NAMUR proximity switches, switches and other field equipment (including intrinsically safe pressure switches, temperature switches, level switches, etc.).

Application

Intrinsic safety description
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliance with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIC
maximum voltage: Um=250V
Intrinsic safety parameter: (7,8,terminals)
Uo=10.5V, Io=14mA, Po=37mW
IIC: Co=2.4μF, Lo=165mH
IIA: Co=75.6μF, Lo=495mH
IIIA: Co=100μF, Lo=1000mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
(1) For distributed capacitance and inductance e.g. as in a cable, allow the values of capacitance and inductance;
(2) For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
(3) For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% of each of the values of capacitance and inductance.

Installation
During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 “Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”, GB 3836.15-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”.

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Tel: 0571-8163 3800
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Songjiang New Industrial Park, Shanghai 201612, P.R. China
Production license number: X06-014-00557

AM1011EX.11(S)E-3.0/16.01
**Isolated Barrier**

**AM1012EX**

**GYB15.1144**

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**Caution**

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technci support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

---

**Summary**

Digital signal input Isolated barrier can transfer the switch or proximity switch signal from hazardous area to safety area. This device has selectable line fault detect (LFD) indicating function and each channel of it can be setting output, input in-phase or reverse phase control mode, it need independent power supply. The power part, the input part and the output part are isolated from each other.

---

**Specification**

**Number of channels:** 2  
**Supply voltage:** 20~35V DC  
**Current consumption:** (at 24Vdc supply, 20mA output) < 40mA  

**Safe area output relay signal:**  
Response time: < 10ms  
Drive ability: 250V AC, 2A or 30V DC, 2A  
Load type: resistive load

**Hazardous-area input:**  
Input signal: switch, proximity detector  
Open circuit voltage: about 8V  
Short circuit current: about 8mA  

**Input/Output Characteristics:**  
Switch closed/input loop-current: > 2.1mA, output relay is energized yellow LED ON.  
Switch open/input loop-current: < 1.2mA, output relay is de-energized yellow LED OFF.

**Function of the switch setting:**

<table>
<thead>
<tr>
<th>Sta.</th>
<th>K1,K3</th>
<th>K2,K4</th>
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<tr>
<td>ON</td>
<td>Reverse</td>
<td>LFD enable</td>
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<td>LFD disable</td>
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Note: Switch(I), K2,K4 must be set to OFF state, no line fault (breakage, short circuit) detection. When using line fault (breakage, short circuit) detection function, resistors must be fitted, 22kΩ in parallel with switch, 680Ω in series with switch, see Switch (II), K2,K4 set to ON state.

**Power supply protection:** Protect the barrier form reverse supply voltage destroy

**Electromagnetic compatibility:** According to IEC 61326-1 (GBT 18268)

**Dielectric strength:**  
Between non-intrinsically safe part and intrinsically safe part: > 2500VAC  
Between power supply part and non-intrinsically safe part: > 500VAC

**Insulation resistance:**  
Between non-intrinsically safe part and intrinsically safe part: > 100MQ  
Between power supply part and non-intrinsically safe part: > 100MQ

**Weight:** Approx. 150g

**Suitable location:** Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.

**Suitable IS apparatus:**  
Compliance with DIN19234 of NAMUR proximity switches, switches and other field equipment (including intrinsically safe pressure switches, temperature switches, level switches, etc.)

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**Application**

**Hazardous-area**

- Safe-area

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**Intrinsic safety description**

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

Compliance with standard: GB3836.1, GB3836.4 and GB3836.20

Ex-marking: (Ex ia Ga) IIC

**maximum voltage:** Um=250V

**Intrinsic safety parameter:** (7.8, 10, 11 terminals)

Uo=10.5V, Io=14mA, Po=37mW  
IIC : Co=2.4μF, Lo=165mH  
IIA : Co=16.8μF, Lo=495mH  
IIIA : Co=75.0μF, Lo=1000mH

Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:

1. For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
2. For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
3. For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% of each of the values of capacitance and inductance.

---

**Installation**

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual GB 50257-1996 Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering; GB 3836.15-2013 Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres, GB 3836.15-2000 Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines) and GB 3836.16-2006 Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines).
**Isolated Barrier**

**AM1013EX**

**GYB15.1144**

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**Caution**

- Please check whether the product type on the package accords to the ordering contract.
- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline.
- Isolated barrier should be located in the safe area.
- Supply voltage is 24VDC, 220VAC is forbidden.
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

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**Summary**

Digital signal input Isolated barrier can transfer the switch or proximity switch signal from hazardous area to safety area. This device has selectable line fault detect (LFD) indicating function and each channel of it can be setting output, input in-phase or reverse phase control mode. It need independent power supply. The power part, the input part and the output part are isolated from each other.

---

**Specification**

Number of channels: 1/2  
Supply voltage: 20–35V DC  
Current consumption: at 24Vdc supply, 20mA output ≤ 40mA  
Safe area output relay signal:  
Response time: ≤ 10ms  
Drive ability: 250V AC, 2A or 30V DC, 2A  
Load type: resistive load  
Hazardous-area input:  
Input signal: switch, proximity detector  
Open circuit voltage: about 8V  
Short circuit current: about 8mA  
Input/Output Characteristics:  
Switch closed/input loop-current > 2.1mA, output relay is energized yellow LED ON.  
Switch open/input loop-current < 1.2mA, output relay is de-energized yellow LED OFF.

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Note: Switch(I), K2.K4 must be set to OFF state, no line fault (breakage, short circuit) detection; When using line fault (breakage, short circuit) detection function, resistors must be fitted, 22kΩ in parallel with switch, 680Ω in series with switch, see Switch (II), K2.K4 set to ON state.

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

Electromagnetic compatibility: According to IEC 61326-1, GB16895 and GB/T 18268

Dielectric strength:  
Between non-intrinsically safe part and intrinsically safe part > 2500VAC  
Between power supply part and non-intrinsically safe part > 500VAC

Insulation resistance:  
Between non-intrinsically safe part and intrinsically safe part > 100MΩ  
Between power supply part and non-intrinsically safe part > 100MΩ

Weight: Approx. 150g

Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.

Suitable IS apparatus:  
Compliance with DIN19234 of NAMUR proximity switches, switches and other field equipment (including intrinsically safe pressure switches, temperature switches, level switches, etc.)

---

**Intrinsic safety description**

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

Compliance with standard: GB3836.1, GB3836.4 and GB3836.20

Ex-marking: [Ex ia Ga] IIC

Maximum voltage: Um=250V

Intrinsic safety parameter: (7.8 terminals)  
Uo=10.5V, Io=1mA, Po=37mW

IIC: Co=2.4μF, Lo=165mH  
III: Co=16.8μF, Lo=495mH

Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:

1. For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance.
2. For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance.
3. For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% of each value of capacitance and inductance.

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**Application**

Hazardous-area

<table>
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<tr>
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<th>Safe-area</th>
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**Installation**

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 "code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering", GB 3836.15-2013 "Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres", GB 3836.15-2005 "Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)", and GB 3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)".

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**Notes**

- During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 "code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".
- GB 3836.15-2013 "Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres".
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---

**Contact Information**

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Production license number: X06-014-00557
Isolated Barrier
AM1021EX
GYB15.1144

Caution

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technic support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

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Fax: 0571-8163 3700
http://www.hollysys.com

Specification

Number of channels: 1
Supply voltage: 20~35V DC
Current consumption: (at 24Vdc supply, .45mA output) ≤ .75mA
Hazardous-area output:
Equivalent output circuit

- Summarize
Isolated Barrier is a loop powered module which enables intrinsically safe devices, such as solenoid valves or alarm transmitters, and some other low-power loads, located in the hazardous area to be controlled from the safe area. The input and the output are electrically isolated from each other. Allow the control switch to connect directly to the either side of power supply circuit.

- Intrinsic safety description
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliance with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIC
maximum voltage: Umax=250V
Intrinsic safety parameter: (7,8, terminals)
    Uo=25V, Io=140mA, Po=875mW
IC: Co=0.11μF, Lo=1.32mH
IB: Co=0.64μF, Lo=3.96mH
IIA: Co=2.97μF, Lo=10.56mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
(1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
(2) For circuits containing up to 1 % inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
(3) For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

- Installation
During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 “Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”, GB 3836.19-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)".

- Application

Hazardous-area

Safe-area

DSC, PLC 24V DC
Alarm
Solenoid Valves

Open-circuit voltage: 22V to 24V
Minimum output voltage: > 12V at 45mA
Power supply protection: Protect the barrier form reverse supply voltage destroy
Electromagnetic compatibility: According to IEC 61326-1 (GB/T 18268)
Dielectric strength:
Between non-intrinsically safe part and intrinsically safe part: > 2500VAC
Insulation resistance:
Between non-intrinsically safe part and intrinsically safe part: > 100MΩ
Weight: Approx. 100g
Suitable IS apparatus:
Solenoid valves, alarm and so on

AM1021EX.11(S)E-3.0/16.01
**Isolated Barrier**

**AM1022EX**

**GYB15.1144**

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### Caution

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- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

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### Specification

- **Number of channels:** 2
- **Supply voltage:** 20~35V DC
- **Current consumption:** (at 24Vdc supply, 45mA output) ≤ 160mA

### Hazardous-area output:

**Equivalent output circuit**

#### Isolation resistance:

- Between non-intrinsically safe part and intrinsically safe part: > 100MΩ

#### Power supply protection:

- Protect the barrier from reverse supply voltage

#### Electromagnetic compatibility:

- According to IEC 61326-1

#### Dielectric strength:

- Between non-intrinsically safe part and intrinsically safe part: > 2500VAC

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### Intrinsics safety description

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

Compliance with standard: GB3836.1, GB3836.4 and GB3836.20

Ex-marking: [Ex ia Da] IIC

Maximum voltage: Um=250V

Intrinsics safety parameter: (7,8,10,11 terminals)

- Uo=25V, Io=140mA, Po=875mW
- IIC: Co=0.11μF, Lo=1.32mH
- IIB: Co=0.84μF, Lo=3.96mH
- IIA: Co=2.97μF, Lo=10.56mH

Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:

1. For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
2. For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
3. For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

### Installation

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 “code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”, GB 3836.19-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”.
**Isolated Barrier**

**AM1031EX**

**GYB15.1144**

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**Caution**

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technic support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

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**Application**

**Hazardous-area**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](Image 66x309 to 211x439)</td>
<td>![Image](Image 66x309 to 211x439)</td>
<td>![Image](Image 66x309 to 211x439)</td>
</tr>
</tbody>
</table>

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 an EX certification.

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**Intrinsic safety description**

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

Compliance with standard: GB3836.1, GB3836.4 and GB3836.20

Ex-marking: [Ex ia Ga] IC

maximum voltage: Ue=250V

Intrinsic safety parameter: (7,8,9) terminals

Uo=28V, Io=93mA, Po=651mW

IIC: Co=0.083μF, Lo=2.4mH

IIA: Co=0.65μF, Lo=12.6mH

IIIA: Co=2.15μF, Lo=33.6mH

Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:

1. For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
2. For circuits containing up to 1 % inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
3. For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

---

**Installation**

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 for the construction and acceptance of electric equipment and GB 50522-2009 for the construction and maintenance of electrical apparatus (other than mines) and GB 3836.15-2000 for explosion protection equipment for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres, GB 3836.15-2000 for explosion protection equipment for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines) and GB 3836.16-2006 for explosion protection equipment for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines).
Isolated Barrier
AM1032EX
GYB15.1144

Caution
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- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
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http://www.hollysys.com

Producer: SHANGHAI CHENZHU INSTRUMENT CO., LTD.
Add: Building 6, 201 Minyi Road, Caohejing Hi-Tech Park
Songjiang New Industrial Park, Shanghai 201612, P.R. China
Production license number: X06-014-00557

AM1032EX.11(S)/E-3.0/17.03

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

Specification
- Number of channels: 1/2
- Supply voltage: 20~35V DC
- Current consumption: (at 24Vdc supply, 20mA output) ≤ 0.75mA
- Safe-area output:
  - Current: 0/4~20mA, HART digital signal
  - Available voltage: Open circuit voltage: ≤ 28V
  - Voltage: >15V at 20mA
  - Normal working current: ≤ 25mA
- Transfer accuracy: 0.1%F.S.
- Temperature drift: 0.005%/F.S./°C
- Response time: Reach 90% of final value in 2ms
- Power supply protection: Protect the barrier form reverse supply voltage destroy
- Electromagnetic compatibility: According to IEC 61326-1
- Dielectric strength:
  - Between non-intrinsically safe part and intrinsically safe part: > 2500VAC
  - Between power supply part and non-intrinsically safe part: > 500VAC
- Insulation resistance:
  - Between non-intrinsically safe part and intrinsically safe part: > 100MΩ
  - Between power supply part and non-intrinsically safe part: > 100MΩ
- Weight: Approx. 150g
- Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.
- Suitable IS apparatus:
  - 2-wire HART transmitter
  - 3-wire transmitter
  - current source

Application

Hazardous-area
Safe-area

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 an EX certification.

Intrinsic safety description
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliancy with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIC
maximum voltage: Um=250V
Intrinsic safety parameter: (7,8,9,terminals)
Uo=28V, Io=93mA, Po=651mW
IIC: Ci=0.083μF, Li=4.2mH
IIB: Ci=0.65μF, Li=12.6mH
IIIA: Ci=2.15μF, Li=33.6mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
(1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
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(3) For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

Installation
During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996“code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”, GB 3836.15-2000“Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000“Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006“Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”. ```
Caution

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

Summary

Isolated barrier, transmits 4–20mA signals to the Ex area in an intrinsically safe manner. It accepts 4–20mA floating signals from a safe-area controller to drive a valve positioned, electric converter and so on. The analog value can be overlaid with digital (HART) communication signals on the Ex or non-Ex side and transmitted bidirectionally. The power part, the input part and the output part are isolated from each other.

Specification

Number of channels: 1
Supply voltage: 20–35V DC
Current consumption: (at 24Vdc supply, 20mA output) < 50mA
Safe-area input:
Current: 0/4–20mA, HART digital signal
Voltage drop: < 2V
Hazardous-area output:
Current: 0/4–20mA, HART digital signal
Load resistance: < 800Ω
Load resistance > 250Ω (HART)
Voltage: 0/1–5V, HART digital signal
Load resistance: > 300kΩ
Note: Users can specify current or voltage output when ordering.
Transfer accuracy: 0.1% F.S.
Temperature drift: 0.005°F/S/°C
Response time: Reach 90% of final value in 2ms
Power supply protection: Protect the barrier form reverse supply voltage destroy
Electromagnetic compatibility: According to IEC 61326-1 (GB/T 18268)
Dielectric strength:
Between non-intrinsically safe part and intrinsically safe part > 2500VAC
Between power supply part and non-intrinsically safe part > 500VAC
Insulation resistance:
Between non-intrinsically safe part and intrinsically safe part > 100MΩ
Between power supply part and non-intrinsically safe part > 100MΩ
Weight: Approx. 100g
Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.
Suitable IS apparatus:
2-wire Valve Positioner, Electropneumatic Converter

Application

Hazardous-area

Safe-area

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 an EX certification.

Intrinsic safety description

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliance with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIc
maximum voltage: Um=250V
Intrinsic safety parameter: (7,8,9 terminals)
U0=28V, I0=93mA, P=651mW
IIC: C=0.083μF, L=4.2mH
IIB: C=0.65μF, L=12.6mH
IIA: C=2.15μF, L=33.6mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
(1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
(2) For circuits containing up to 1 % inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
(3) For connection of the combined inductance and capacitance where both are greater than 1 % of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

Installation

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering", GB 3836.15-2013 "Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres", GB 3836.15-2000 "Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)", GB 3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)".
**Isolated Barrier**

AM1051EX

GYB15.1144

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**Caution**

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

---

**Summary**

Isolated barrier, can convert thermocouple signal, millivolt signal mounted in hazardous area into 4~20mA current for driving a safe-area load. It’s an intelligent instrument with the function of auto cold-end-compensation, it’s measure range and thermocouple division are programmable through computer. This product need be supplied independently, and the power supply, input and output are isolated from each other.

**Specification**

- Number of channels: 1
- Supply voltage: 20~35V DC
- Current consumption: ≤ 35mA (at 24V DC supply, 20mA signal output)

**Safe-area output:**
- Current: 4~20mA; Load resistance: RL ≤ 300Ω
- Voltage: 1~5V; Load resistance: RL > 20kΩ

(Note: output current: load resistance: RL ≤ 550Ω, Current consumption: ≤ 50mA, need to be customized)

**Hazardous-area input:**

- Supply voltage is 24V DC, 220V AC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

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**Intrinsic safety description**

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

Compliance with standard: GB3836.1, GB3836.4 and GB3836.20

Ex-marking: [Ex ia Ga] IIC

maximum voltage: Uin=250V

Intrinsic safety parameter: (7,8,9, terminals)

- Uo=8.5V, Io=20mA, Po=43mW
- IIC: Co=6.5μF, Lo=3.6mH
- IIB: Co=60μF, Lo=10.8mH
- IIA: Co=100μF, Lo=28.8mH

Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:

1. For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
2. For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
3. For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% of each of the values of capacitance and inductance.

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**Application**

- Hazardous-area
- Safe-area

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**Installation**

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering", GB 3836.13-2013 "Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres", GB 3836.15-2000 "Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)", and GB 3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)".
**Isolated Barrier**

**AM1052EX**

**GYB15.1144**

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**Caution**

- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

---

**Summary**

Isolated barrier, can convert thermocouple signal, millivolt signal mounted in hazardous area into 4~20mA current for driving a safe-area load. It's an intelligent instrument with the function of auto cold-end compensation, it's measure range and thermocouple division are programmable through computer. This product need be supplied independently, and the power supply, input and output are isolated from each other.

**Specification**

**Number of channels:** 1/2  
**Supply voltage:** 20~35V DC  
**Current consumption:** ≤ 55mA (at 24V DC supply, 20mA signal output)

**Safe-area output:**  
- Current: 4~20mA; Load resistance: Rs ≤ 300Ω;  
- Voltage: 1~5V; Load resistance: Rs > 2kΩ.  
(Note: output current: load resistance: Rs<550Ω.
- Current consumption: ≤75mA, need to customized)

**Hazardous-area input:**

<table>
<thead>
<tr>
<th>Signal type</th>
<th>Signal Range</th>
<th>Min. span</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>-200°C→+400°C</td>
<td>50°C</td>
<td>0.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>-200°C→+900°C</td>
<td>50°C</td>
<td>0.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>+200°C→+1372°C</td>
<td>50°C</td>
<td>0.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>-200°C→+1300°C</td>
<td>50°C</td>
<td>0.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>-40°C→+1768°C</td>
<td>500°C</td>
<td>1.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>+320°C→+1820°C</td>
<td>500°C</td>
<td>1.5%/0.1%</td>
</tr>
<tr>
<td></td>
<td>-100mV→+100mV</td>
<td>10mV</td>
<td>20uV/0.1%</td>
</tr>
</tbody>
</table>

Note: 1% is related to the adjusted measurement range (the value to be applied is the greater).  
2. When TC signal input, the conversion accuracy does not include the cold junction compensation error, and the conductor resistance increasing per 100Ω, the cold junction compensation will add 0.2°C.  
3. When B type TC signal input, the temperature range lower limit should be greater than 680°C. Then it can satisfy the precision index.  

**Alarm indication:**

- Under lower limit, LED is flashing, display yellow, output current is around 3.8mA.  
- Exceed upper limit, LED is flashing, display red, output current is around 20.8mA.  
- Breakage, LED is flashing, display yellow and red alternately, output current is around 20.8mA.  
(Remarks: alarm current <4mA or other special requirements, be customized)

- **Temperature drift:** 0.01%/F.S./℃  
- **Response time:** Reach 90% of final value in 1s

**Power supply protection:** Protect the barrier form reverse supply voltage destroy

**Electromagnetic compatibility:** According to IEC 61326-1 (GBT 18268)

**Dielectric strength:**  
- Between non-intrinsically safe part and intrinsically safe part≥2500VAC  
- Between power supply part and non-intrinsically safe part≥500VAC

**Insulation resistance:**  
- Between non-intrinsically safe part and intrinsically safe part≥100MΩ  
- Between power supply part and non-intrinsically safe part≥100MΩ

**Weight:** Approx. 150g

**Suitable location:** Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.

**Suitable IS apparatus:** T, E, J, K, N, R, S, B and mV signal

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**Application**

**Hazardous-area**

**Safe-area**

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**Intrinsic safety description**

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)  
Compliency with standard: GB3836.1, GB3836.4 and GB3836.20  
Ex-marking: [Ex ia Ga] IIC  
maximum voltage: Um=250V  
Intrinsic safety parameter: (7,8,9,terminals)  
Us=8.5V, Is=20mA, Po=43mW  
IIC: Co=46.5μF, Lo=3.6mH  
IIB: Co=60μF, Lo=10.8mH  
IIA: Co=100μF, Lo=28.8mH  
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:  
(1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;  
(2) For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;  
(3) For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

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**Installation**

During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering, GB 3836.13-2013 “Electrical apparatus for explosion gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000 “Electrical apparatus for explosion gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”.

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**Entrust:** Hangzhou Hollysys Automation Co., Ltd.  
Add: NO.19 street Economic & Technic Developing Zone, Hangzhou  
Post: 310016  
Tel: 0571-8163 3800  
Fax: 0571-8163 3700  
http://www.hollysys.com

**Producer:** SHANGHAI CHENZHU INSTRUMENT CO., LTD.  
Add: Building 6, 201 Minyi Road, Caoshanjing Hi-Tech Park  
Songjiang New Industrial Park, Shanghai 201612, P.R. China  
Production license number: X06-014-00557

**AM1052EX.11(S)E-3.0/17.03**
Isolated Barrier
AM1061EX
GYB15.1144

Caution
- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technical support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

Entrust: Hangzhou Hollysys Automation Co., Ltd.
Add: NO.19 street Economic & Technic Developing Zone, Hangzhou
Post: 310016
Tel: 0571-8163 3800
Fax: 0571-8163 3700
http://www.hollysys.com

Producer: SHANGHAI CHENZHU INSTRUMENT CO., LTD.
Add: Building 6, 201 Minyi Road, Caohejing Hi-Tech Park Songjiang New Industrial Park, Shanghai 201612, P.R. China
Production license number: X06-014-00557
AM1061EX.11(S)E-3.0/16.5

Summarize
Isolated barrier, can convert signals from 2-wire, 3-wire RTDS signal mounted in hazardous area into 0/4-20mA current or 0/1-5V voltage. It can be configured by PC. It’s measure range and thermal resistance division are programable through computer. This product need be supplied independently, and the power supply, input and output are isolated from each other.

Specification
Number of channels: 1
Supply voltage: 20~35V DC
Current consumption: < 35mA (at 24V DC supply, 20mA signal output)
Safe-area output:
Current: 4~20mA; Load resistance: R<300Ω
Voltage: 1~5V; Load resistance: R<55Ω (Note: current consumption: <50mA, need to customized)

Hazardous-area input:
<table>
<thead>
<tr>
<th>Signal type</th>
<th>Signal Range</th>
<th>Min. span</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1100</td>
<td>~200℃ ~ +850℃</td>
<td>20℃</td>
<td>0.2℃/0.1%</td>
</tr>
<tr>
<td>Cu50</td>
<td>~50℃ ~ +150℃</td>
<td>20℃</td>
<td>0.2℃/0.1%</td>
</tr>
<tr>
<td>Cu100</td>
<td>~50℃ ~ +150℃</td>
<td>20℃</td>
<td>0.2℃/0.1%</td>
</tr>
</tbody>
</table>

Note: 1. % is related to the adjusted measurement range (the value to be applied is the greater).
2. RTD input, allow max wire resistance 50Ω (3-wire).

Alarm indication:
Under lower limit, LED L is flashing, output current is around 3.8mA.
Exceed upper limit, LED H is flashing, output current is around 20.8mA.
Break line, both L and H are flashing, output current is around 20.8mA.
Short circuit, both L and H are flashing, output current is around 3mA.
(Note: disconnection alarm current<4mA or other special requirements, need to be customized).

Temperature drift: 0.01°F/S/℃
Response time: Reach 90% of final value in 1s

Electromagnetic compatibility: According to IEC 61326-1 (GB/T 18268),
Dielectric strength:
Between non-intrinsically safe part and intrinsically safe part: 2500VAC
Between power supply part and non-intrinsically safe part: 500VAC
Insulation resistance:
Between non-intrinsically safe part and intrinsically safe part: >100MO
Between power supply part and non-intrinsically safe part: >100MO

Weight: Approx.110g
Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.
Suitable IS apparatus: P1100, Cu50, Cu100

Intrinsic safety description
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliancy with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIC
maximum voltage: Um=250V
Intrinsic safety parameter: (7,8,9,terminals)
Uo=8.5V, Io=20mA, Po=43mW
IIC: Co=6.5μF, Lo=3.6mH
IIIA: Co=60μF, Lo=10.8mH
IIIA: Co=100μF, Lo=28.8mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
(1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
(2) For circuits containing up to 1 % inductance or up to 1 % capacitance with a cable, allow the values of capacitance and inductance;
(3) For connection of the combined inductance and capacitance where both are greater than 1 % of the allowed value (excluding the cable), allow up to 50% of each of the values of capacitance and inductance.

Application
Hazardous-area
Safe-area

Note: terminals 8 and 9 must be connected when 2-wire RTD inputs.

Installation
During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual,GB 50257-1996 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering", GB 3836.13-2013 "Electrical apparatus for explosive gas atmospheres Part 13:Repair and overhaul for apparatus used in explosive gas atmospheres", GB 3836.15-2000 "Electrical apparatus for explosive gas atmospheres Part 15:Electrical installations in hazardous areas other than mines"and GB 3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16:Inspection and maintenance of electrical installation (other than mines)".

Isolated Barrier
AM1062EX
GYB15.1144

Caution
- Please check whether the product type on the package accords to the ordering contract;
- Read this manual carefully before installation or using. If there is something unclear, please dial technic support hotline;
- Isolated barrier should be located in the safe area;
- Supply voltage is 24VDC, 220VAC is forbidden;
- Users are not allowed to dismantle or repair the barrier otherwise it will induce malfunction.

Entrust: Hangzhou Hollysys Automation Co.,Ltd.
Add: NO.19 street Economic &Technic Developing Zone,Hangzhou
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Fax: 0571-8613 3700
http://www.hollysys.com

Producer: SHANGHAI CHENZHU INSTRUMENT CO.,LTD.
Add: Building 6, 201 Minyi Road, Caohejing Hi-Tech Park Songjiang New Industrial Park, Shanghai 201612, P.R. China Production license number: X06-014-00557

AM1062EX.11(S)E-3.0/17.03

Summary
Isolated barrier, can convert signals from 2-wire, 3-wire RTDS signal mounted in hazardous area into 0/4~20mA current or 0/1~5V voltage. It can be configured by PC. It’s measure range and thermal resistance division are programable through computer. This product need be supplied independently and the power supply,input and output are isolated from each other.

Specification
Number of channels: 1/2
Supply voltage: 20~35V DC
Current consumption: ≦ 55mA (at 24V DC supply, 20mA signal output)
Safe-area output:
- Current: 4~20mA; Load resistance: RL ≧ 300Ω
- Voltage: 1~5V; Load resistance: RL ≥ 20kΩ
(Note: output current: load resistance: RL ≧ 550Ω, Current consumption: ≦ 50mA, need to be customized)
Hazardous-area input:

<table>
<thead>
<tr>
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<th>Signal Range</th>
<th>Min. span</th>
<th>Accuracy</th>
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<td>P1100</td>
<td>200℃ ~ +850℃</td>
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<td>0.2℃/0.1%</td>
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<td>Cu50</td>
<td>50℃ ~ +150℃</td>
<td>20℃</td>
<td>0.2℃/0.1%</td>
</tr>
<tr>
<td>Cu100</td>
<td>50℃ ~ +150℃</td>
<td>20℃</td>
<td>0.2℃/0.1%</td>
</tr>
</tbody>
</table>

Note: 1. % is related to the adjusted measurement range (the value to be applied is the greater).
2. RTD input, allow max wire resistance 50.0 (3-wire).

Alarm indication:
Under lower limit, LED is flashing, display yellow, output current is around 3.8mA.
Exceed upper limit, LED is flashing, display red, output current is around 20.8mA.
Break line LED is flashing, display yellow and red alternately, output current is around 20.8mA.
Short circuit, LED is flashing, display yellow and red alternately, output current is around 3mA.
(Note: disconnection alarm current<4mA or other special requirements, need to be customized).

Temperature drift: 0.01%F.S./℃
Response time: Reach 90% of final value in 1s
Power supply protection: Protect the barrier form reverse supply voltage destroy

Electromagnetic compatibility: According to IEC 61326-1(GB/T 18268),
Dielectric strength:
Between non-intrinsically safe part and intrinsically safe part≥2500VAC
Between power supply part and non-intrinsically safe part≥500VAC
Insulation resistance:
Between non-intrinsically safe part and intrinsically safe part≥100MΩ
Between power supply part and non-intrinsically safe part≥100MΩ
Weight: Approx.150g
Suitable location: Mounting in non-hazardous area, and connected to the IS apparatus in zone 0 hazardous area.
Suitable IS apparatus: P1100, Cu50, Cu100

Intrinsic safety description
National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Compliance with standard: GB3836.1, GB3836.4 and GB3836.20
Ex-marking: [Ex ia Ga] IIC
maximum voltage: Um=250V
Intrinsic safety parameter: (7,8,9.terminals)

Uo=8.5V, Io=20mA, Po=43mW
IIC : Co=6.5μF, Lo=3.6mH
IIA : Co=60μF, Lo10.8mH
IIB : Co=100μF, Lo28.8mH
Largest external capacitance (Co) and inductance (Lo) numerical attention when using the following requirements:
1) For distributed inductance and capacitance e.g. as in a cable, allow the values of capacitance and inductance;
2) For circuits containing up to 1% inductance or up to 1% capacitance with a cable, allow the values of capacitance and inductance;
3) For connection of the combined inductance and capacitance where both are greater than 1% of the allowed value (excluding the cable), allow up to 50% each of the values of capacitance and inductance.

Installation
During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB 50257-1996 “code for construction and acceptance of electronic device for explosion atmospheres and fire hazard electrical equipment installation engineering”, GB 3836.13-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres”, GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”. Note: terminals 8 and 9 must be connected when 2-wire RTD inputs.

Application

Hazardous-area

Safe-area

Note: 1. the wiring and the connection of Co and Lo need to be designed and calculated separately.
2. The numbers of Co and Lo need to be customized.
3. The installation (other than mines)” and GB 3836.13-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres” and GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”. Note: terminals 8 and 9 must be connected when 2-wire RTD inputs.

Application

Hazardous-area

Safe-area

Note: 1. the wiring and the connection of Co and Lo need to be designed and calculated separately.
2. The numbers of Co and Lo need to be customized.
3. The installation (other than mines)” and GB 3836.13-2013 “Electrical apparatus for explosive gas atmospheres Part 13: Repair and overhaul for apparatus used in explosive gas atmospheres” and GB 3836.15-2000 “Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)” and GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)”. Note: terminals 8 and 9 must be connected when 2-wire RTD inputs.