# **XPB Series Analog Input Isolated Barrier Data Sheet**

### 1. General

**XPB Series Analog Input Isolated Barrier** can cooperate with 2-wire transmitter, 3-wire transmitter and 2-wire current sources, provide isolated power supply for transmitter which located in hazardous area. The product transfers analog signal which generated by the transmitter from hazardous area to safe area separately. It restricts the energy from intrinsically safe port to hazardous area, insuring the system against explosion. It widely used in chemical industry, petroleum, natural gas, electricity, and other industrial fields. It is connected with all kinds of intrinsic safety instruments and used as the associated equipment of intrinsically safe explosion-proof system.



The product meets *GB3836.1-2010 Explosive atmospheres - Part 1: Equipment-General requirements* and *GB3836.4-2010 Explosive atmospheres - Part 4: Equipment protection by intrinsic safety "i*". It has passed the test of China National Test Centre for Explosion Protect Electrical Products and obtained the Explosion-proof Certificate.

### 2. Features

- Input, output and power are completely isolated, with strong anti-interference ability
- High accuracy, high linearity, long term running stability
- Modular design, small size, low power consumption, suitable for intensive installation
- Plug-in construction, easy installation, disassembly and maintenance

## 3. Safety Description

Approvals: [Exia Ga] II C								
	Product Type	Cooperate with 2/4-wire transmitter	Cooperate with 3-	wire transmitter				
	Equipment	Terminal 4 to 6, Terminal 1 to 3	Terminal 1 to 4	Terminal 4 to 6				
	Um	250V	250V	250V				
	Uo	28V	28V	1.2V 100mA				
	lo	93mA	93mA					
	Po	655mW	655mW	30mW				
	Со	50nF	50nF	70µF				
	Lo	2.4mH	2.4mH	2.2mH				

### 4. Specifications

Power supply: DC24V±10% Power consumption:  $\leq$ 1.2W / channel Supply output: available voltage: 16V@20mA open circuit voltage: 28V short circuit current: 40mA Input: DC voltage, DC current, hazardous area Input resistance: voltage input  $\geq$ 500KΩ current input  $\leq$ 200Ω Output: DC voltage, DC current, safe area Load resistance: voltage output  $\geq$ 5KΩ current output  $\leq$ 350Ω Accuracy: ±0.1%F.S, ±0.2%F.S Temp. coefficient: ≤±100PPM/°C Insulation resistance: ≥100MΩ/500VDC Dielectric strength: input/output ≥2000VAC (1min) input/power ≥2000VAC (1min) output/power ≥1000VAC (1min) Operating temperature: 0~50°C Storage temperature: -40~80°C Operating humidity: 10~90%RH Atmospheric pressure: 86~106kPa Installation: DIN 35mm rail Dimension: 122mm×18mm×96mm

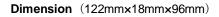
Addr: Building B,AscendasiHub,No.5 Xinghan Road,SIP Tel: +86-512-68381801 +86-512-68381802 1 - Fax: +86-512-68381803 +86-512-68381939 Web: http://www.surpon.com

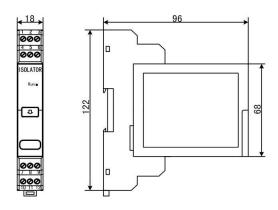
## 5. Ordering Information

### XPB series code table :

ХРВ —	· [	Туре —		Input 1 –	_	Input 2 –	- C	Dutput 1 –		Dutput 2
		<b>_</b>						<b>•</b>		<b>_</b>
	Code	Туре	Code	Rang	Code	Rang	Code	Rang	Code	Rang
	G	Isolation	A420	4-20mA	A420	4-20mA	A420	4-20mA	A420	4-20mA
	P	Current Loop	A020	0-20mA	A020	0-20mA	A020	0-20mA	A020	0-20mA
		Supply	A010	0-10mA	A010	0-10mA	A010	0-10mA	A010	0-10mA
			H420	4-20mA+Hart	H420	4-20mA+Hart	H420	4-20mA+Hart	H420	4-20mA+Har
*			V010	0-10V	V010	0-10V	L420	2-wire 4-20mA	L420	2-wire 4-20m/
Analog Input V15 1-5V   Isolated Barrier V05 0-5V				V15	1-5V	V010	0-10V	V010	0-10V	
				V05	0-5V	V15	1-5V	V15	1-5V	
			V075	0-75mV	V075	0-75mV	V05	0-5V	V05	0-5V
			Y	Option	Y	Option	V075	0-75mV	V075	0-75mV
						None	Y	Option	Y	Option
					L				, <u> </u>	None

## 6. Dimension & Installation





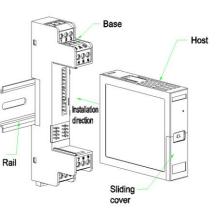
#### Installation

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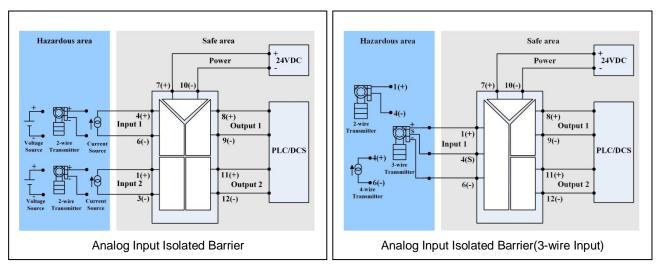
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Terminals



# 7. Typical Connection



Note: The connection diagrams given in this manual are typical. When installing, please refer to the connection diagram on the product.

- 2 -

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### 8. Examples of ordering

Refer to the code table above and provide the model number correctly.

- Example 1 input: hazardous area, one channel 4-20mA, output: safe area, two channels 4-20mA, power supply: 24VDC order model: XPB-G-A420-A420-A420 (abbreviated as: XPB-G-A420-2A420)
- Example 2 input: hazardous area, one channel 2-wire 4-20mA, output: safe area, one channel 4-20mA, power supply: 24VDC

order model: XPB-P-A420-A420

Example 3 input: hazardous area, one channel 0-10V, output: safe area, two channels 0-10V, power supply: 24VDC order model: XPB-G-V010-V010 (abbreviated as: XPB-G-V010-2V010)

#### 编号: CNEx19.0396 编号: CNEx19.0395 CNEX CNEX 防爆合格证 防爆合格证 国家防爆 国家防爆 制造单位 苏州迅鹏仪器仪表有限公司 (江苏省苏州市工业园区星汉街5号B幢6楼) 制造单位 苏州迅鹏仪器仪表有限公司 (江苏省苏州市工业园区星汉街5号B幢6楼) 温度变送隔离式安全栅 产品名称 隔离式安全栅 产品名称 型号规格 XPB-P DC24V 型号规格 XPB-E DC24V 防爆标志 [Ex ia Ga]IIC 防爆标志 [Ex ia Ga]IIC Q/MXB 29-2017 产品标准 产品标准 Q/MXB 33-2017 WG-RY-155 总装图号 WG-RY-143 总装图号 经对上述产品票样及技术文件的审查和样品检验。确认符合下列标准, GB3386.1-2010(當性性环境 第1部分,设备通用要求) GB3386.4-2010(當性性环境 第4分,由本质安全型"个保护的设备) GB3386.2-2010(爆炸性环境 第20部分,设备保护吸剧(EPL)为 Ga 级的设备) 经对上述产品图样及技术文件的审查和样品检验,确认符合下列标准: 223日上四7日回時年及274、2月1日9年日10日回日8月19431日(737919年 GB3386.1-2010(爆炸性环境 第1部分,设备强用原求) GB3386.4-2010(爆炸性环境 第4部分,由本质安全型""保护的设备) GB3836.20-2010(爆炸性环境 第20部分,设备保护吸到(EPL)为Ga级的设备) 記事: 1、本連千町代表XPB-E防电偶温度変送隔离式安全緩和XPB-R热电温温度変送隔离式安全 億、防爆标志均为 [Exia Ga]IIC。 2、本安橡数 (1-4-6週) 19分: Um:250VACIDC Uo:6.6VDC, Io:68mA, Po:0.112W, Co:15 µF, Lo:5mH 3、安全注意事项以使用说明书。 1. 本证书町代表 XPB-P 和 XPB-G 两种型号的隔离式安全器, 防爆标志均为 [Exia Ga]JIC。 2. 本安春数 (15歳,46届) 均为, Um:250VAC/DC Uo:28VDC, Io:38mA, Po:0.65W, Co:0.05 µ F, Io:2.4mH 3. 安全注重集页及使用说明书。 品质 う 颁发日期 年1月24日 2019年1月24日 **女**本证有效期 中心主任 颁发日期 月24日至2024年 0 年1月24日至2024 木证有效期 20 月23日 Ex cost 南阳防爆电气研究所 Ex 送起,中国河南省南阳市 邮政编码,473008 电话,0377-63258564 传真,0377-63208175 COST 南阳防爆电气研究所 地址:中国河南省南阳市: 部改编码,473008 电话:0377-63258564 传真:0377-63208175





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- 3 -