

# XP Series Frequency Isolated Transmitter Data Sheet

## 1. General

**XP Series Frequency Isolated Transmitter** (one input one output, one input two outputs) receives frequency signal from the industrial field, such as proximity switch, dry contact, voltage pulse, and converts into a standard process signal that has a linear relationship with the frequency range. It is widely used in data acquisition, signal transmission and conversion, PLC, DCS and other industrial measurement and control systems in the fields of machinery, electricity, telecommunications, petroleum, chemical industry, steel, sewage treatment, building construction, etc. It is used to perfect and supplement the function of the system I/O plug-in, improve the anti-interference ability of the automatic control system, and ensure the stability and reliability of the system.



## 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. Specifications

Power supply: DC24V±10%

Power consumption: ≤1.8W

Input: frequency signal, dry contact, proximity switch, TTL, voltage pulse  
 contact signal input: short circuit current 8mA  
 open circuit voltage 8V  
 other signal input: design before order

Pulse width: ≥10μs

Frequency range: 0.1Hz~100KHz (design before order)  
 (Lower than 0.1Hz, treat as 0Hz)

Measurement resolution: 0.01Hz

Frequency error: 0.01Hz or 0.05%F.S (according to the max)

Measurement cycle: 0.1S

Response time: 1s (0~90%F.S)

Output : DC voltage, DC current

Load resistance: voltage output ≥10KΩ  
 current output ≤350Ω

Output accuracy: ±0.1%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: -40~85°C

Operating humidity: 10~90%RH

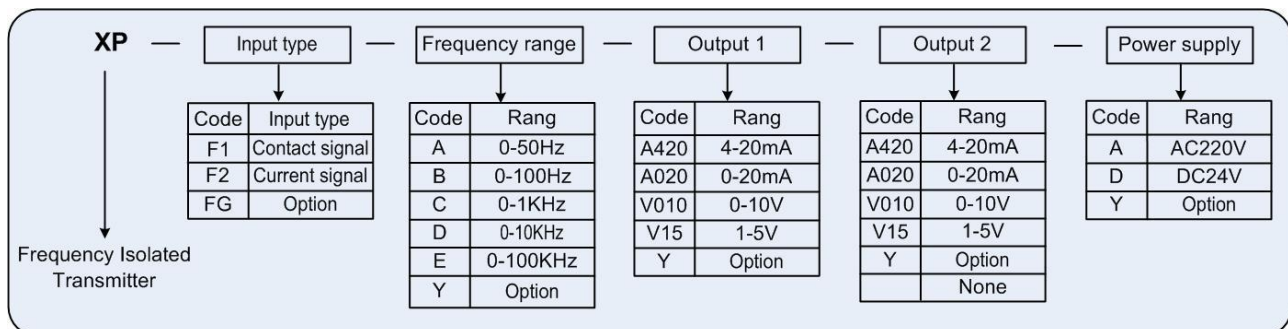
Atmospheric pressure: 86~106kPa

Installation: DIN 35mm rail

Dimension: 122mm×18mm×96mm

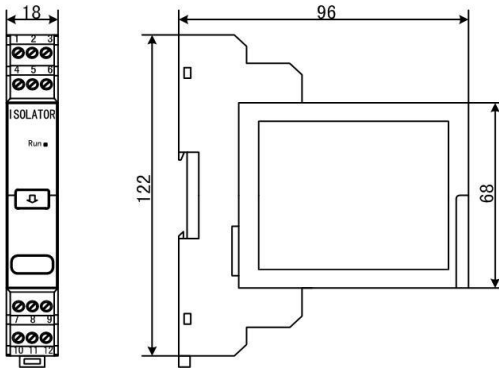
## 4. Ordering Information

XP series code table :

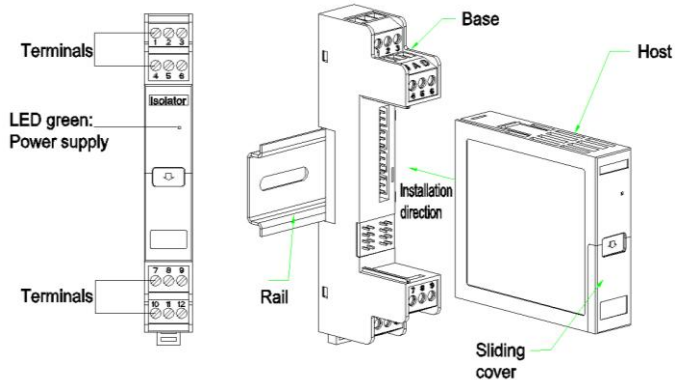


## 5. Dimension & Installation

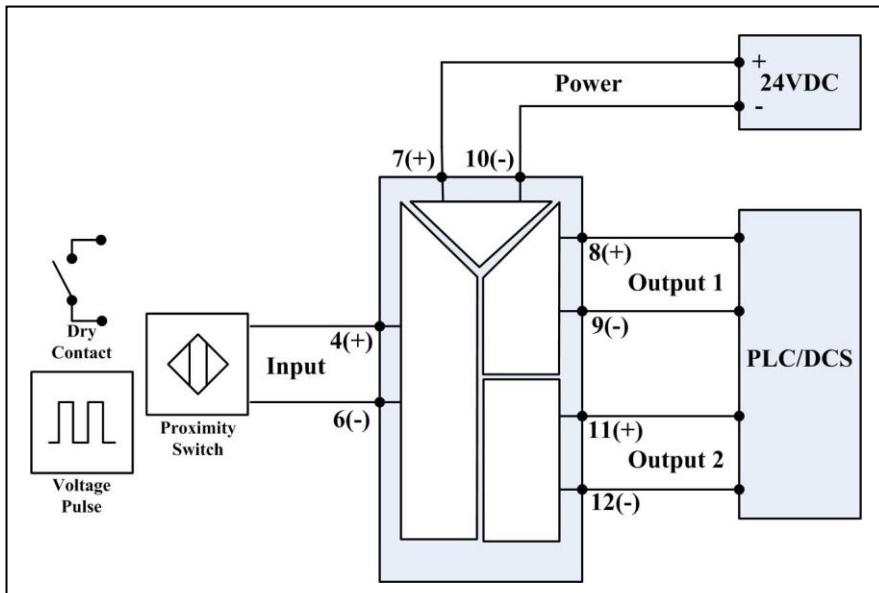
Dimension (122mm×18mm×96mm)



Installation



## 6. Typical Connection



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

## 7. Examples of ordering

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

Example 1 input: one channel 0/24V voltage pulse, frequency range: 0~1KHz, output: one channel 4-20mA,  
power supply: 24VDC

order model: XP-F2-C-A420-D

Example 2 input: one channel proximity switch, NAMUR signal, frequency range: 0~2000Hz, output: one channel 1~5V,  
power supply: 24VDC

order model: XP-F1-Y-V15-D (Y=0~2000Hz)



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