

**Operation Manual**  
**For**  
**XYJ Series Intelligent Multi-input Polling Meter**



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- I. Brief Introduction**
- II. Main Technical Parameters**
- III. Input Signal**
- IV. Operation Method**
- V. The Model Selecting**
- VI. The Installation**
- VII. Order Details**

### **I. Brief Introduction**

XYJ series intelligent digital multi-input polling meter is a kind of high performance and intelligent meter, its main characteristic is as follows:

1. This meter applies to the sensor such as temperature, pressure, rate of flow, humidity and liquid level etc. or transmitter and various voltages and current input signal. It can poll to display the above parameters and alarm at the upper and lower limit.
2. With linearizing microchip technology, it has higher precision in the range of entire measurement.
3. Can set alarm value for the upper and lower limit of each input signal, and this value will not be lost when power failure.
4. For thermocouple type sensor; it has a automatic temperature compensation in the range of 0℃~100℃.
5. It has a sensor broken line protection function.
6. Polling progress can be carried out by hand or automatically.

### **II. Main Technical Parameters**

1. Power source: AC220V (±15%); Power consumption: 3~4 W; Frequency: 50 Hz
2. Precision: 0.5%, 0.2%;
3. Resolution capacity: According to measurement range, divide into 1, 0.1 or 0.01;
4. LED Display: Former four digits nixie tubes display measured value and upper and lower limit alarm set value, two latter digits nixie tubers display the input signal loops.
5. Input impedance: Current signal: ≤100Ω; Voltage signal: ≥100KΩ; Resistance signal: The current through measure resistance is less than 1mA;
6. The relay contacts output capacity: 3A/220VAC or 5A/24VDC resistance load.
7. Overall Dimension: 160X80X80 (mm) (horizontal type or vertical);
8. Installation: Flush mounting.
9. Mounting Hole Dimension installation: 156 X76(mm);
10. Ambient temperature: The 0~50℃; Relative humidity: ≤85% (without corrosion gas);

### **III. Input Signal**

1. Thermocouple signal:

Calibration number is:

K (0~1300℃)    S (0~1600℃)  
E (0~1000℃)    B (0~1800℃)

2. Thermal resistance signal (three line system inputs):

Calibration number is:

Cu50 (-50.0~+150.0°C)  
Pt100 (-200.0~+600.0°C)

2. Standard signal:  
4~20mA, 0~10mA, 1~5V, 0~10V

#### IV. Operation Method

1. Manual/Automatic/Eliminate Alarm:

A. Press this key to change the manual or automatic operation state. In the state of manual operation, the manual indicator light lights;  
B. Can be used to eliminate the alarm state.

2. Mode Key: It is effective under automatic state. Cycling selects certain digit(s) position of the upper and lower limit value; the selected digit(s) will flash. The set value is the alarm value of present loop no.

3. Up/Observe Key:

Under automatic state: A. Without press the Up Key, this key can set used in observation of upper and lower limit alarm value; B. After press Up Key, it is used to adjust the figure of the position selected.

Under manual state: It is used to change circuit inspection (monitoring) loop.

4. The change method of polling inspection of input signal loop: When under manual state, each press of Up/observe Key the input signal loop will add one; every 5 seconds to add one automatically in automatic state.

5. Set value stores automatically: After stop operating each button 8 seconds, the set value will be stored automatically, and the meter enters measure state.

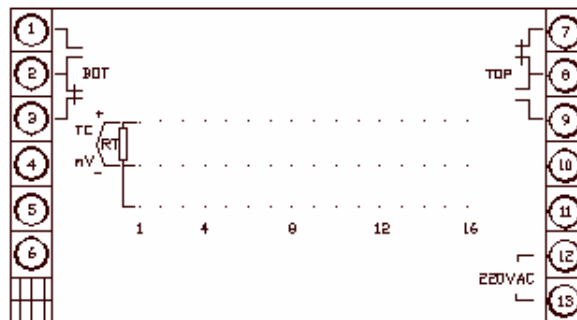
6. Alarm condition: When the display value is higher than upper limit or open circuit, the relay of upper limit operates; when low than lower limit, the relay of lower limit operates.

#### V. The Model Selecting

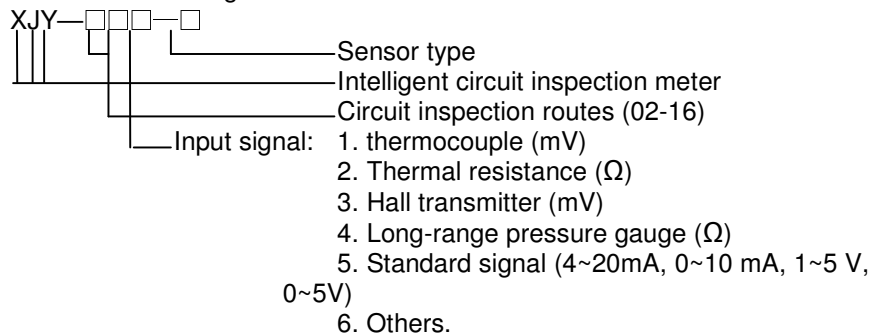
This series meters divides into 2-16 loops input signal and 15 kinds of specifications according to polling point. According to input signal, divide into 3-line system resistance signal, couple signal, standard voltage and current signal lamp.

#### VI. The Installation

Should inspect the meter model, calibration number, measure range and sensor before installation and make sure whether it is consistent to your requirement. Then, directly push meter in installation open hole. Wiring method refers to sketch at the backboard.



### Model and meaning



### Explanations:

- (1) Resistance type meter: the longitudinal 1-16 row of the socket is respectively as the 1-16 lines of three-line system resistance sensor input terminals and connect with each end of the resistance individually; the intermediate and bottom lines' terminals connect the two outlet wires of another end of resistance.
- (2) Couple type meter, millivolt signal meter, standard signal meter, voltmeter, ammeter etc.: The longitudinal 1-16 row of the socket is respectively as the 1-16 lines of polling signal input terminals. The top line terminals are as positive terminal, the intermediate line terminals are as negative terminal (the bottom line terminals is not available).
- (3) Lower limit alarm: From the terminals 1, 2, 3, lead-out a group of normal close and normal open contacts.
- (4) Upper limit alarm: From the terminals 7, 8, 9, lead-out a group of normal close and normal open contacts.

### VII. Order Details

1. Explains the model of required meter.
2. Explains input signal or sensor model and measure range in detail.
3. Special models can contact with manufacturer.
4. Warranty period: one year after the product delivery.