

## EP8-SVA Digital Display Sensor Indicator User's Manual



**Features:**

- 1) Be applicable for sensor with liner output features or other equipments such as measuring pressure, weight, temperature, humidity and so on.
- 2) With decimal point, span, range and digit zero setting function
- 3) With transmitted analog 4~20mA output.
- 4) Auxiliary output power supply +12V or 24V

For your safe, please read the below content carefully before you use the temperature controller !

**Safe Caution**

※ For your safe, please read the below content carefully before you use the temperature controller !

Please comply with the below important points:

- ⚠ Warning An accident may happen if the operation does not comply with the instruction.
- ⚠ Notice An operation that does not comply with the instruction may lead to product damage.

※ The instruction of the symbol in the manual is as below:  
 ⚠ An accident danger may happen in a special condition.

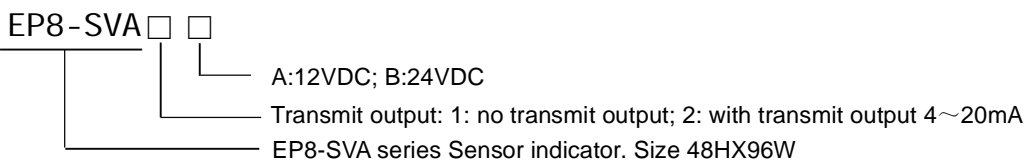
**Warning**

1. A safety protection equipment must be installed or please contact with us for the relative information if the product is used under the circumstance such as nuclear control, medical treatment equipment ,automobile, train, airplane, aviation, entertainment or safety equipment, etc. Otherwise, it may cause serious loss, fire or person injury.
2. Apanel must be installed, otherwise it may cause creepage (leakage).
3. Do not touch wire connectors when the power is on, otherwise you may get an electric shock.
4. Do not dismantl or modify the product, If you have to do so, please contact with us first. Otherwise it may cause electric shock and fire.
5. Please check the connection number while you connect the power supply wire or input signal, otherwise it may cause fire.

**Caution**

1. This product cannot be used outdoors. Otherwise the working life of the product will become shorter, or an electric shock accident may happen.
2. When you connect wire to the power input connector or signal input connectors, the moment of the No.20AWG (0.50 mm2) screw tweaked to the connector is 0.74n.m-0.9n.m. Otherwise the connectors may be damaged or get fire.
3. Please comply with the rated specifications. Otherwise it may cause fire after the working life of the product becomes shorter.
4. Do not use water or oil base cleaner to clean the product. Otherwise it may cause electric shock or fire, and damage the product.
5. This product should be avoid working under the circumstance that is flammable, explosive, moist, under sunshine, heat radiation and vibration.
6. In this unit it must not have dust or deposit, otherwise it may cause fire or mechanical malfunction.
7. Do not use gasoline, chemical solvent to clean the cover of the product because such solvent can damage it. Please use some soft cloth with water or alcohol to clean the plastic cover.

**1.Code Illustration:**



## 2.Ordering Code

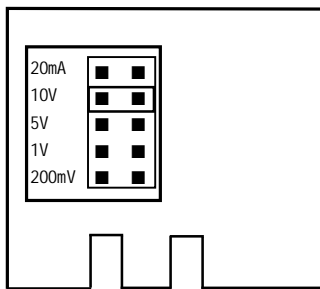
Model	EP8-SVA1A	EP8-SVA2A	EP8-SVA1B	EP8-SVA2B
Functions				
Transmit output	No	Yes	No	Yes
Auxiliary power supply	DC 12V	DC 12V	DC 24V	DC 24V

## 3.Technical Specifications

Testing function	Testing with various kinds of sensors
Input mode	Current: 4~20mA(0~20mA) Voltage:0~10V (0~1V,1~5V,0~5V, 0~200mV)
Accuracy	±0.5%F.S±2Digit (23°C±5°C)
A/D converter	Dual slope
Sampling rate	about 2.5/s
Response speed	about 4.5/s
Max.Display	Free setting decimal point for 1999
Display	Red LED 14.2mm H
Loading of analog output	≤600Ω
Power consumption	≥3.5VA
Operating temperature	0°C~50°C
Power supply	AC 110V/220V 50/60Hz
dimension	48mm(H)×96mm(W)×112mm(L)
Weight	about 350g
Insulation strength	AC 1500V / 1min
Insulation impedance	DC 500V ≥100MΩ

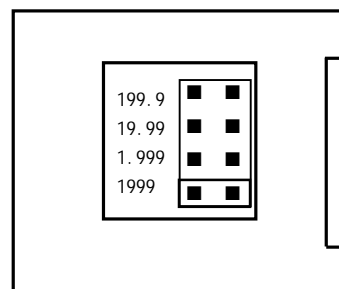
## 4.Function Setting

When switch between the measuring range and the decimal point ,make sure to pull out the PCB. Please refer below drawings:



The measuring range setting pin

Figure 1



The decimal point setting pin

Figure 2

### 1). Range setting ( refer to drawing 1)

The positions of jumper cap	20mA	10V	5V	1V	200mV
Input range	4~20mA/0~20mA	0~10V	0~5V/1~5V	0~1V	0~200mV

### 2).Decimal point setting( refer to drawing 2)

While moving the jumper cap on different PIN head, you can get the position of the Decimal point that you want.

Notes:The original setting range is 0~10V display 0~2000,you can adjust it as you want.

## 5. Display Adjusting

While setting the SPAN and ZERO, please adjust as following:

### 1). SPAN Adjusting

Input a typical value, when in clockwise rotation the display value can be increased; and the display value can be decreased when in counter-clockwise rotation.

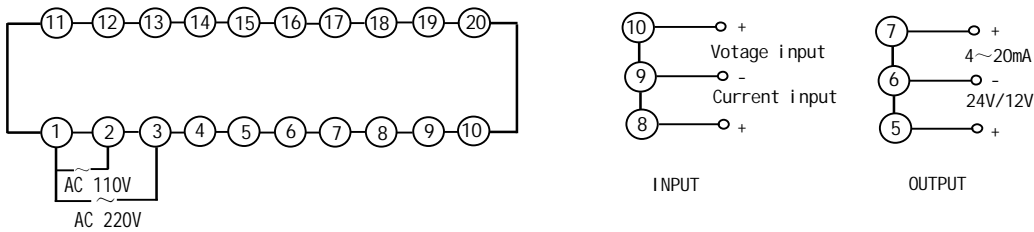
### 2). ZERO Adjusting

For ZERO Adjusting Function, when in clockwise rotation adjusting, it is forward bias; when in counter-clockwise rotation adjusting, it is reverse bias.

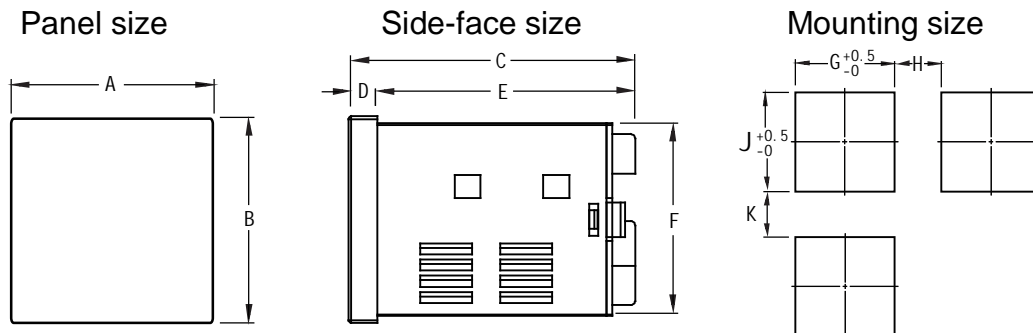
Notes: After the adjustment of span value and measuring range setting, you need to check whether zero need to be re-adjusted.

Zero adjustment must be in zero input or input a value needed to be adjusted. For example: for 4~20mA input, 4mA input, if you want to display zero, you must input 4mA in the terminal then adjust to zero. In order to diminish error, please adjust span and zero repeatedly.

## 6. Terminal Connection



## 7. Figure and Dimensions



Code	A	B	C	D	E	F	G	H(Min)	J	K(Min)
3: (36*72)	72	36	85.5	6	79.5	30.5	67	25	31	25
4: (48*48)	48	48	101	10	91	45	45.5	25	45.5	25
6: (96*48)	48	96	100	6	94	91	45.5	25	91.5	25
7: (72*72)	72	72	100	10	90	67.5	68	25	68	25
8: (48*96)	96	48	100	6	94	45	91.5	25	45.5	25
9: (96*96)	96	96	101	10	91	90.5	91	25	91	25
12: (120*120)	120	120	101	10	91	110	110.5	30	110.5	30
80: (80*160)	160	80	102	10	92	76	154	30	76.5	30
16: (160*80)	80	160	102	10	92	153.5	76.5	30	154	30
Remark	Unit: (mm) Tolerance+0.5%(special requirement should indicate)									

## 8. Cautions

- Used in ambient temperatures of 0°C to 50°C, humidity less than 85%R.H.
- Input wire should not be too long, shielded wire would be better.
- Operation and installation should be far away from the disturbant source.
- Avoid violent vibrations or shock.
- Avoid dust or corrosive chemical.
- Store the meter in the shade with temperature of -10°C to 70°C, and humidity less than 60%. Don't contact with organic solvents or oils.