

## SG8-SVA Digital Sensor Display Meter User's Manual



### Features:

- Be applicable for sensors with linear output features or other equipments, such as measuring pressure, weight, temperature and humidity and so on
- With decimal point, span, range and zero point setting functions.

For your safety, please read following content carefully before you are using the meter!

### ■ Safe Caution

- ※ Please read the manual 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 and equipment etc. Otherwise, it may cause serious loss, fire or person injury.
2. A panel 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 dismantle 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 connectors or signal input connectors, the moment of the No.20 AWG (0.50 mm<sup>2</sup>) 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 specification. Otherwise it may cause electric shock or fire, and damage the product.
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. Otherwise it may cause explosion.
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、 Technical Parameter

Measuring function	Equipped with many kinds of sensors
Input mode	Current: 4~20mA(0~20mA) Voltage: 0~10V (0~5V, 0~200mV)
Accuracy	±0.5%F.S±2Digit (23°C±5°C)
A/D conversion	Dual slope
Sampling speed	About 2.5 times/s
Response speed	About 4.5 times /s
Max display	1999 set decimal point freely
Display	Red LED (14.2mm high)
Power consume	≥3.5VA
Ambient temperature	0°C~50°C
Power supply	AC 220V 50Hz
Dimension	48mm(H)×96mm(W)×70mm(L)
Weight	500g
Dielectric strength	AC 1500V 1min
Insulated impedance	DC 500V ≥100MΩ

## 2、 Function Setting

While setting the range and the decimal point, be sure to pull out the internal printed circuit board, as the following figure shows.

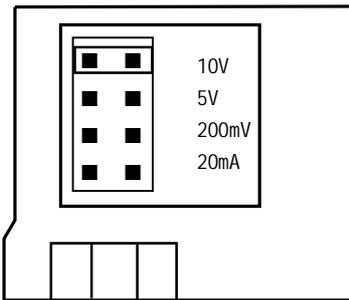


Figure 1

Range setting by short-connecting the pins

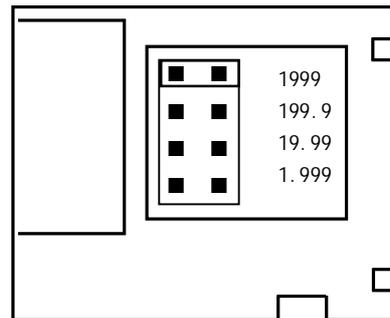


Figure 2

Decimal point setting by changing the pin head

### 2.1.Range setting (Figure1)

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

### 2.2.Decimal point settig ( Figure 2 )

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

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

### 3、 Display Value Adjusting

While setting the span and zero, please do as follows :

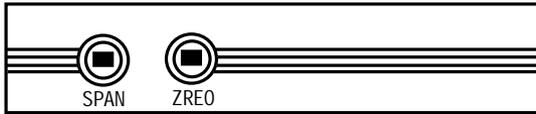


Figure 3

#### 3.1 Span adjustment (SPAN)

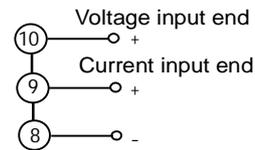
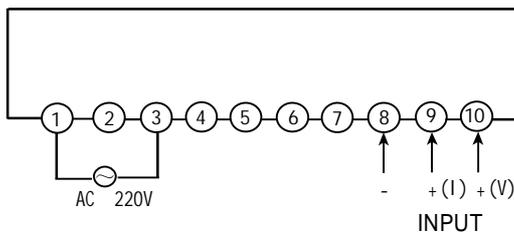
Input a typical value, the display value can be increased, when forward adjust, the display value can be decreased while reverse adjust.

#### 3.2 Zero piont adjustment (ZREO)

Forward adjust is forward biased, reverse adjust is reverse biased.

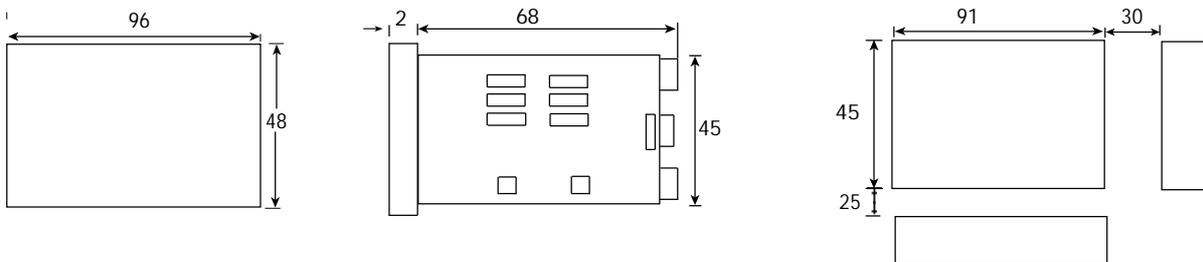
Notes: After the adjustment of span value and scale setting, you need to check whether zero need to be reset. Zero adjustment must be in zero input or input shortcircuit or an adjustment signal. Fox example, inputting 4~20mA, if you want to must input 4mA in the terminal then adjust to zero. In order to diminish error, please adjust span and zero repeatedly.

### 4、 Terminal Connecting



Input conneting drawing (INPUT)

### 5、 Dimension



### 6、 Cautions

1. Used in ambient temperatures of 0°C to 50°C, humidity less than 85%R.H.
2. Input wire should not be too long, had better be shielded.
3. Operation and installation should be far away from the disturbant source.
4. Avoid using by violent vibrations or crash .
5. Avoid dust or corrosive chemical.
6. 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 oil .