

FSV3000EV/5V 系列高精度电压传感器

应用磁通门原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电压。具有超高的精度及线性度，超高的灵敏度及分辨率，极低的失调电流及温度漂移。广泛应用于仪器仪表，医疗设备，计量及校准，实验室，高精度电源，新能源汽车等。

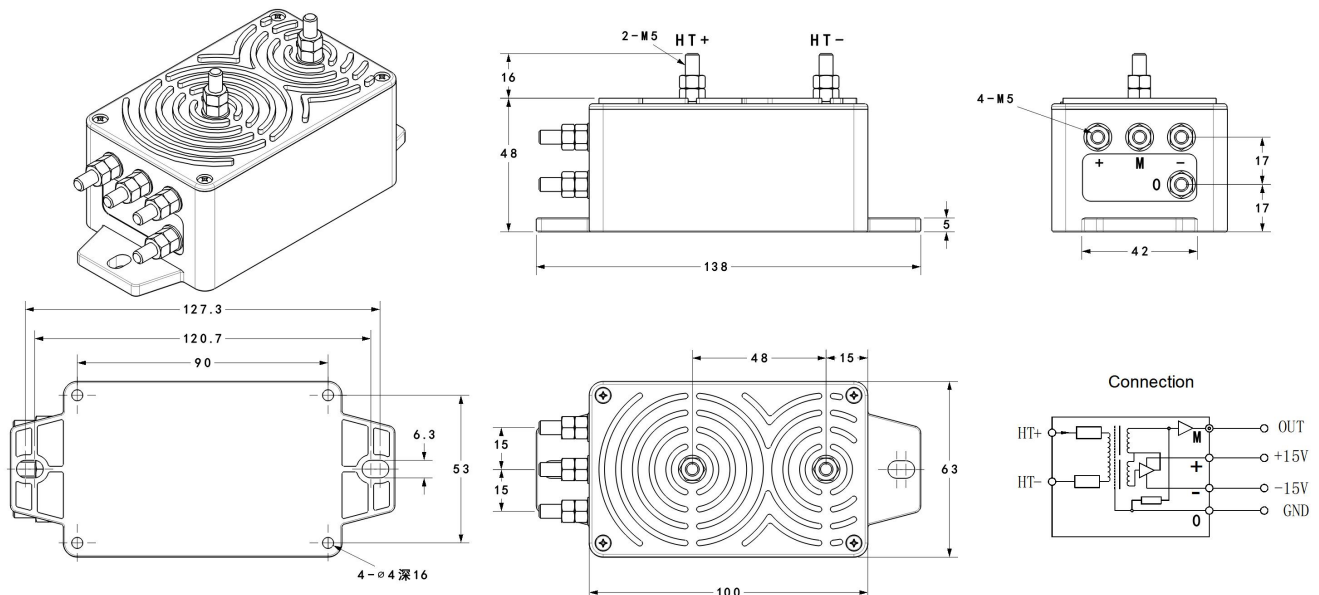
Current sensors applying the fluxgate principle are capable of measuring DC, AC, pulse and various irregular waveforms under galvanic isolation. Voltage. They are characterized by high accuracy and linearity, high sensitivity and resolution, very low out-of-phase current and temperature drift. Widely used instrumentation, medical equipment, metrology and calibration, laboratories, high-precision power supplies, new energy vehicles and so on.



电参数/Electrical characteristics								
	型号 Type	FSV050EV	FSV200EV	FSV500EV	FSV1000EV	FSV2000EV	FSV3000EV	
V _{PN}	原边额定输入电压 Primary nominal input voltage	50	200	500	1000	2000	3000	V
V _P	原边电压测量范围 Measuring range of primary voltage	±120%						
V _{OUT}	副边额定输出电压 Nominal output voltage	5						V
V _C	电源电压 Supply voltage	±12~±15(±5%)						V
I _C	电流消耗 Current consumption	V _P =0 <35						mA
V _d	绝缘电压 Insulation voltage	在原边与副边电路之间 6kV 有效值/50Hz/1 分钟						
ε _L	线性度 Linearity	<0.05						%FS
X	精度 accuracy	T _A =25°C V _C =±15V ±0.1						%
V ₀	零点失调电压 Zero offset voltage	T _A =25°C <±5						mV
V _{OT}	失调电压温漂 Offset voltage temperature	V _P =0 T _A =-25~+85°C <±0.1						mV/°C
T _r	响应时间 Response time	<1						μs
f	频带宽度(-3dB) Band width (-3dB)	DC~100						kHz
T _A	工作环境温度 Operating ambient temperature	-25~+85						°C
T _S	贮存环境温度 Ambient operating temperature	-40~+100						°C

R_p	输入内阻(约) Input internal resistance (approx.)	50K	200K	0.5M	1.0M	2.0M	3.0M	Ω
R_L	负载电阻 Load resistance	$\geq 5K$						Ω
C_L	负载电容 load capacitance	< 5						nF
m	质量(约) weight (approx)	480						g
	标准 Standard	GI/FS-0105						

外形尺寸(mm)/Dimensions of drawing(mm)



使用说明/Remarks

1. 传感器错误的接线可能导致模块损坏。
Incorrect wiring of sensors can lead to module damage.
2. 传感器通电后，当被测电压从传感器输入 HT+端和 HT-端接入，即可在输出端测得同相电压值。
After the sensor is energized, when the measured voltage is accessed from the sensor inputs HT+ and HT-, the same-phase voltage value can be measured at the output.
3. 传感器安装使用环境应无导电尘埃及腐蚀性。
The environment in which the sensor is installed and used should be free of conductive dust and corrosion.
4. 传感器安装好后，操作人员勿触摸任何裸露导电部分。必要时可对传感器进行防护，如加防护罩等。
Once the sensor is installed, the operator should not touch any exposed conductive parts. Protect the sensor if necessary, e.g. by adding a protective cover.