

FS10000HB 系列霍尔电流传感器

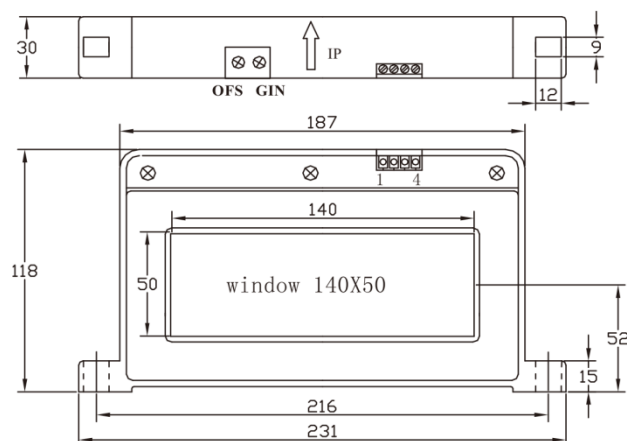
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC,pulsed and mixed current.



电参数/Electrical characteristics							
	型号 Type	FS2000HB	FS3000HB	FS4000HB	FS8000HB	FS10000HB	
I_{PN}	原边额定输入电流 Primary nominal input current	2000	3000	4000	8000	10000	A
I_P	原边电流测量范围 Measuring range of primary current	$0 \sim \pm 4000$	$0 \sim \pm 5000$	$0 \sim \pm 6000$	$0 \sim \pm 10000$	$0 \sim \pm 12000$	A
V_{OUT}	副边额定输出电压 Nominal output voltage	$4 \pm 1\%$					V
V_C	电源电压 Supply voltage	$\pm 12 \sim \pm 15 (\pm 5\%)$					V
I_C	电流消耗 Current consumption	$V_C = \pm 15V$ < 25					mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间 2.5KV 有效值/50Hz/1 分钟 2.5KV RMS /50Hz/1 min between primary and secondary side circuits					
ϵ_L	线性度 Linearity	< 1					%FS
V_0	零点失调电压 Offset voltage	$T_A = 25^\circ C$ $< \pm 25$					mV
V_{OM}	磁失调电压 Residual voltage	$I_{PN} \rightarrow 0$ $< \pm 30$					mV
V_{OT}	失调电压温漂 Thermal drift of V_0	$I_{PN} = 0$ $T_A = -25 \sim +85^\circ C$ $< \pm 1$					mV/ $^\circ C$
T_r	响应时间 Response time	< 7					μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~3					kHz
T_A	工作环境温度 Ambient operating temperature	$-40 \sim +85$					$^\circ C$
T_S	贮存环境温度 Ambient storage temperature	$-40 \sim +100$					$^\circ C$
R_L	负载电阻 Load resistance	$\geq 10K$					Ω
	标准 Standard	GI/FS-0105					

外形尺寸(mm)/Dimensions of drawing(mm)



引脚输出: 1, +15V 2, -15V 3, Vout 4, 0V(电源地) OFS, 零点调节 GIN, 幅度调节

引线输出: 红, +15V 蓝, -15V 黄, Vout 黑, 0V(电源地)

Elucidation: 1: +15V 2: -15V 3: VOUT 4: 0V (GND) OFS: Zero adjustment GIN: Gain adjustment (Red: +15V Blue: -15V Yellow: VOUT Black: 0V)

使用说明/Remarks

- 错误的接线可能导致传感器损坏。传感器通电后, 当被测电流从传感器箭头方向穿过, 即可在输出端测得同相电压值。
Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase voltage value can be measured at the output end.
- 传感器的输出幅度可根据用户需求进行适当的调节。
The output amplitude of the sensor can be adjusted according to the user's needs.
- 可按用户需求定制不同额定输入电流和输出电压的传感器。
Sensors with different rated input current and output voltage can be customized according to user requirements.