

HDC-50X Series Hall Current Sensor

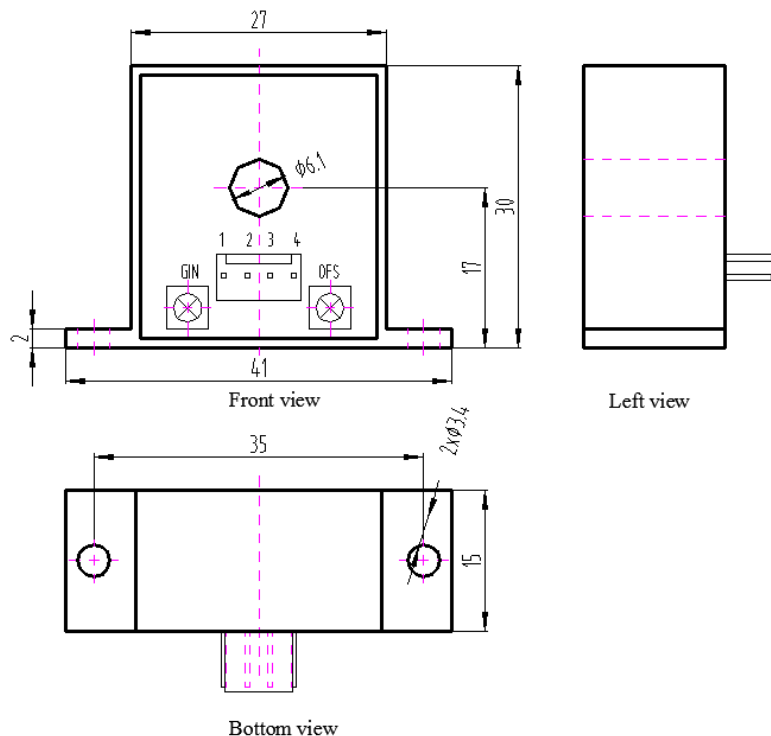
Introduction

HDC-50X Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

△Electrical Parameters (Ta=25℃)

Type		HDC-10X	HDC-30X	HDC-50X
Parameters	Symbols			
Nominal measuring current	I_{PN}	10A	30A	50A
Linear range	I_p	0~±15A	0~±50A	0~±75A
Nominal output voltage	V_{SN}	±4V±0.04V		
Zero offset voltage	V_O	≤±0.05V($I_{PN}=0$)		
Temperature drift of bridge offset	V_{OT}	≤±1mV/℃		
Linear error	ξ_L	±1%		
Response time	T_r	≤7 μS		
Supply voltage	V_c	±15V±5%		
Isolation voltage	V_d	2.0KV/50 or 60Hz/1min		
Power dissipation current	I_c	±20mA		
Frequency bandwidth	f	DC~50KHz(-3dB)		
Operating temperature	T_a	-25℃~+85℃		
Storage temperature	T_s	-40℃~+90℃		

△Dimensions: (mm)



Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Small size and space saving
- ◆ Low power consumption
- ◆ High immunity against external disturbance

Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ Power supply for electric welding machine

Instructions for Use:

- ◆ Connect the wire of transducer in correct way as required.
- ◆ Inputting measured current from punched core of transducer, the in-phase voltage signal can be obtained from output end by sampling.

Connection and adjustment:

- ◆ 1: +Vc (+15V)
- ◆ 2: -Vc (-15V)
- ◆ 3: Output
- ◆ 4: 0V
- ◆ OFS: Offset
- ◆ GIN: Gain