# **HDC-10000HA1 Series Hall Current Sensor**

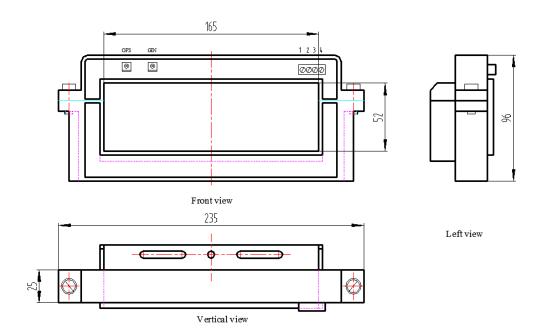
#### Introduction

HDC-10000HA1 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°C)

		,			
Type			HDC-3000HA1	HDC-5000HA1	HDC-10000HA1
Parameters	Symbols	HDC-2000HA1			
Nominal measuring current	$I_{PN}$	2000A	3000A	5000A	10000A
Linear range	$I_P$	0~±3000A	0~±4500A	0~±7500A	0~±15000A
Nominal output voltage	$V_{SN}$	$\pm 5V\pm 0.05V(RL=10K\Omega)$			
Zero offset voltage	Vo	$\leq \pm 0.03 \text{V}(I_{PN}=0)$			
Temperature drift of bridge offset	V <sub>OT</sub>	≤±1mV/°C			
Linear error	ξL	±1%			
Supply voltage	Vc	±15V±5%			
Isolation voltage	$V_d$	5.0KV AC with 50 or 60Hz/1min			
Power dissipation current	$I_{C}$	±30mA			
Power dissipation current	Та	-25°C∼+85°C			
Frequency bandwidth	Ts	-40°C∼+90°C			

## $\triangle$ Dimensions: (mm)





#### Features:

- ◆Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆Excellent linearity
- ◆ Punching way has no insertion loss

#### **Applications:**

- ◆Communication power supply
- ◆Uninterruptible power supply (UPS)
- **♦**Chopper
- **♦**Electrochemistry
- **◆**Rectification
- ◆Power monitoring

#### **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: 0V
- ♦2: Output
- ♦3: -Vc (-15V)
- **♦**4: +Vc (+15V)
- ♦OFS: Offset
- ♦GIN: Gain