

## hall current sensor

**Model:** YDG-HSD-2-A

**Name:** hall current sensor

# YDG-HSD-2-□A Hall Current Sensor

## 1. Summary

Hall sensors of YDG series can measure currents and voltages in any wave style. The output can reflect the I/V input in any wave style truly. Aiming at the defect of big temperature excursion in hall sensors, compensating circuit is adopted in order to reduce ill effect in measurement accuracy. The sensors have characters of high accuracy, convenient installment and low price.

Hall sensors of YDG series are applied in frequency inverter, UPS power, communication power, electric melting machine, electric engine, transformer substation, numerical control machine tool, PC control, electric network control and others needing measure currents and voltages separately.

## 2. Model specification

## 3. Thoery

Primary current and final current of the hall sensors are insulated totally, and final current reflects primary current wave styles truly such as DC, AC, pulse current etc. The sensor has the short response time, strong over-load capacity, good temperature characters, continual output, good stability and other merits.

## 4. Technolgy index


Measuring range	$2I_N$	Frequency characteristic	0~10kHz
Over load capacity	$20I_N$	Insulating endurance	AC2.0kV/min·1mA
Accuracy class	$<1.0\%I_N$	Working condition	0~45℃
Linearity	Excelled 0.2%	Working power	$\pm 12V \sim \pm 15V$ , +12V, +15V
Off-tune voltage	Less than $\pm 20mV$	Power consumption	$\leq 30mA$

T drift	Excelled $\pm$ 100ppm/ $^{\circ}$ C	Flame retardancy	UL94-V <sub>0</sub>
Response time	Less than 10 $\mu$ s	Inner surge and anti-polarity protection to power	

## 5. Executive criterion

QB/441600 17 113-2002

## 6. Model and parameters

Model	Input/output	Pin	
YDG-HSD-2-50A	0~50A/0~4V	1: positive	
YDG-HSD-2-100A	0~100A/0~4V	2: negative	
YDG-HSD-2-150A	0~150A/0~4V	3: output	
YDG-HSD-2-200A	0~200A/0~4V	4: ground	
YDG-HSD-2-300A	0~300A/0~4V		

## 7. External dimension

## 8. Notice

- 1) The power port and the output port should be connected correctly.
- 2) The temperature of original border generatrix must be less than 60 $^{\circ}$ C.
- 3) Please do not adjust outer variable resistances at random. If do, circumrotate slowly to the demanded precision by the little screwdriver.
- 4) Get the best measuring precision when current generatrix fill in the hole of primary current fully.
- 5) No electric dust or corrosive metal exist in working condition, altitude is less than 2500 miles.
- 6) When the current direction should be same as the arrowhead direction marked on the box on measurement of DC, the correct direction output will be gotten.