

## Multi-range precision current sensor

### HCJ-5/2KB

Multi-range precision current sensor for measuring DC, AC and pulse current, the measured current on the primary side is electrically isolated from the output current on the secondary side

**Feature:**

- Multi range: 5-2000A RMS (DC, AC, pulse current)
- Measurement frequency: DC~50KHz
- Accuracy (25°C):±0.2%
- Response time:<1uS
- Linearity:<0.1%
- Can simultaneously measure DC, AC, and pulse currents
- High isolation between primary current and secondary output signal
- Manufacturing of closed-loop Hall magnetic compensation principle

HCJ Series hall effect current sensor

Part No	Rated current I <sub>N</sub> (A)	I <sub>r</sub> (A)	I <sub>m</sub> (mA)	Accuracy T <sub>a</sub> =25°C	Turns ratio K <sub>N</sub>	Load Resistance		I <sub>off</sub> (mA)	V <sub>c</sub> (V)	I <sub>c</sub> (mA)	V <sub>i</sub> (KV)	T <sub>a</sub> (°C)	W(g)	Input hole mm
						Ω <sub>min</sub>	Ω <sub>max</sub>							
HCJ-5/2KB	5/10/25/50/100	±1.2xI <sub>N</sub>	200	0.2%	80...4:2000	0	5	±0.3	±24	90+IM	6	0~+50	7000	P1...S1~5
<b>multirange</b>	<b>200/400</b>	<b>±3000</b>	<b>200</b>	<b>0.2%</b>	<b>2/1:2000</b>	<b>0</b>	<b>5</b>	<b>±0.3</b>	<b>±24</b>	<b>90+IM</b>	<b>6</b>	<b>0~+50</b>	<b>7000</b>	<b>φ102</b>
	1000	±3000	500	0.2%	1:2000	0	5	±0.3	±24	90+IM	6	0~+50	7000	φ102
	2000	±3000	1000	0.2%	1:2000	0	5	±0.3	±24	90+IM	6	0~+50	7000	φ102

Output parameter of HCJ Series hall effect current sensor

Rated current I <sub>N</sub> (A)	measuring range I <sub>P</sub> (A)	Output current I <sub>M</sub> (mA)	Turns ratio K <sub>N</sub>	Input hole
5	±6	200	80:2000	P1...S1
10	±12	200	40:2000	P1...S2
25	±30	200	16:2000	P1...S3
100	±120	200	4:2000	P1...S4
200	±1500	200	2:2000	Φ102、2Ts
400	±3000	200	1:2000	Φ102、1Ts
1000	±3000	500	1:2000	Φ102、1Ts
2000	±3000	1000	1:2000	Φ102、1Ts

I <sub>N</sub>	Nominal current	V <sub>off</sub>	Offset voltage
V <sub>N</sub>	Nominal voltage	T <sub>d</sub>	Temperature drift
I <sub>p</sub>	Measuring range	L	Linearity
R <sub>M</sub>	Measuring resistance	T <sub>r</sub>	Response time
I <sub>M</sub>	Output current	f	Frequency bandwidth
V <sub>M</sub>	Output voltage	T <sub>a</sub>	Operating temperature
K <sub>N</sub>	Turns ratio	T <sub>s</sub>	Storage temperature
X	Accuracy	I <sub>c</sub>	Current consumption
V <sub>c</sub>	Supply voltage	R <sub>s</sub>	Secondary resistance
V <sub>i</sub>	Isolation voltage	R <sub>N</sub>	Primary resistance
I <sub>off</sub>	Offset current	W	Weight

