

# Hall split core current sensor

Open loop split core type, hanging installation, Crimping terminal. Testing DC current and pulse current, original circuit and second-side circuit is high insulated.



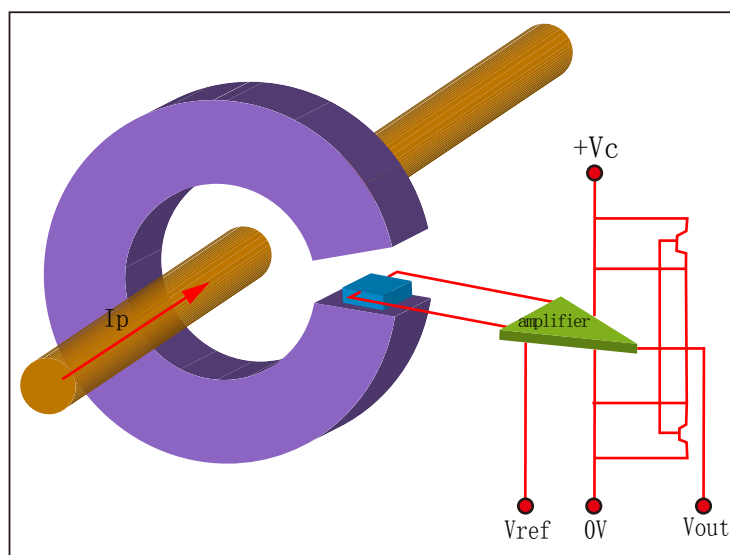
Serial number	input	output	Supply
①	100A	$1.65V \pm 0.625V$	+3.3V
②	100A	$1.65V \pm 0.625V$	+5V
③	100A	$1.65V \pm 1V$	+3.3V
④	100A	$1.65V \pm 1V$	+5V

**Characteristics:**

- Small size
- Light-weight
- Low power dissipation
- Good linearity
- No insertion loss
- Low response time
- Good anti-interference ability

**Product application:**

- Railway
- Metallurgy
- Welding machine
- Wattmeter
- Robot
- DC motor
- Inverter
- Variable-frequency governor
- Vehicle power management system
- UPS Uninterruptible power supply and communication power supply



**Principle:** Using hall device directly detects the primary magnetic field generated by the current in the primary conductor, and output voltage signal by linearly amplifies. The inside of the sensor uses a unique stable temperature compensation circuit to reduce the influence of external voltage and temperature on the sensor to lowest.

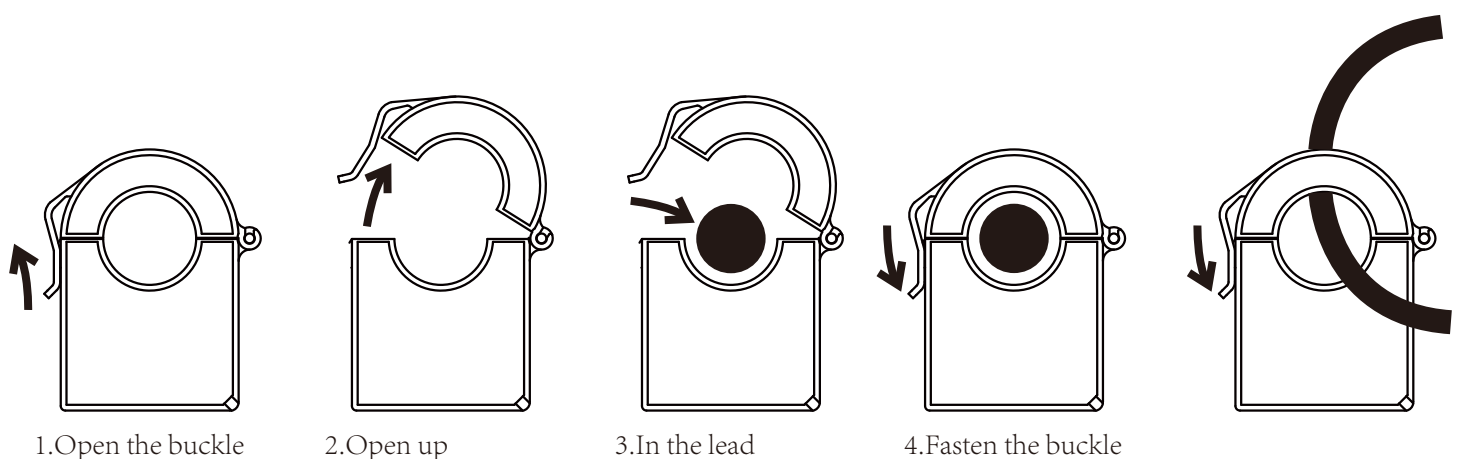
## Technical index and electrical parameter

IP	Rated input	$\pm 100A$		*Saturation current 500A
IPM	Measuring range	$\pm 150A$	$\pm 120A$	
VOUT	Rated output	$1.65V \pm 0.625V$	$1.65V \pm 1V$	*Output a choice
X	Accuracy	1%		
$\epsilon L$	Linearity	1%		
VC	Supply voltage( $\pm 5\%$ )	$+3.3V/+5V$		*Alternative auxiliary power
IC	Current consumption	$\pm 15mA$		
RL	Load impedance	$\geq 10K \Omega$		
VOE	Zero Offset TA=25°C	$\leq \pm 15mV$		
TR	Response time	$< 3 \mu s$		*Subject to actual measurement
N.W	Weight	100g		
BW	Work temperature	$-10 \sim +70^\circ C$		
Ta	Storage temperature	$-25 \sim +85^\circ C$		
Ts	Band width	DC~25KHz		*Factory test according to DC
Vd	Dielectric strength	2.5KV 50Hz 1min		

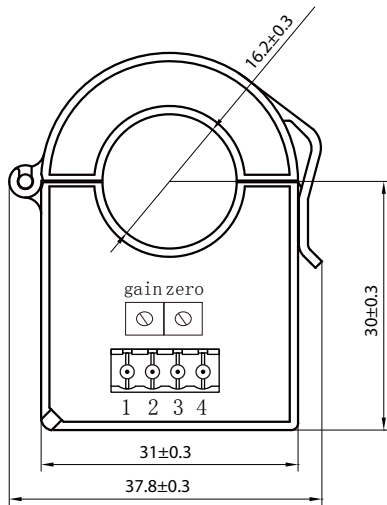
Instructions for use:

1. Pay attention to the direction of the current and wire it according to marked wiring.
2. The temperature of the primary conductor should not exceed 100 degrees.
3. Response time and follow-up are optimal for full hole measurement.

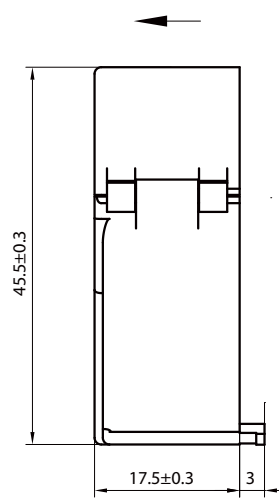
### Primary threading method:



Dimensions(mm):



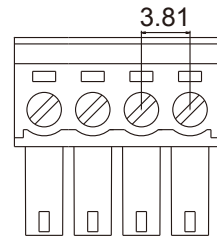
Front view



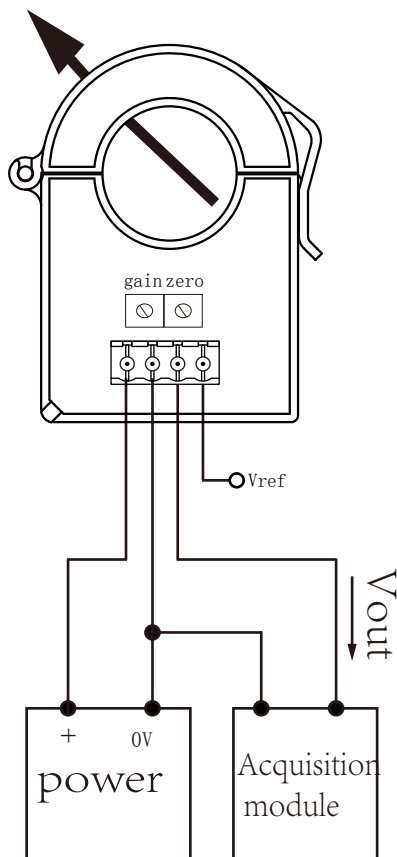
Side view

Current direction:  
Epoxy surface ← Print surface

Connector Illustration:



Connection diagram



Cable definition:

- 1: +V
- 2: 0V
- 3: Vout
- 4: Vref

Potentiometer definition

- left: gain
- right: zero

(suspensibility)

※Testing:

- ①choose small ripple(≤ 10mV)  
stabilized auxiliary power supply(APS)
- ②get through APS
- ③APS connect sensor
- ④sensor test primary current