FU-HSR-40

HIGH QUALITY ECONOMIC AC/DC 600A HALL CURRRENT SENSOR

Hall current sensors are mainly suitable for isolating and converting complex signals such as AC, DC, and pulse. Through the Hall effect principle, the transformed signal can be directly converted by AD DSP, PLC, Various acquisition devices such as secondary instruments directly collect data and are widely used in current monitoring and battery applications, inverter and solar power management systems, DC screens and DC motor drives, electroplating, welding applications, and frequency converters, UPS servo control and other system current signal acquisition and feedback control have advantages such as fast response time, wide current measurement range, high accuracy, strong overload capacity, good linearity, and strong anti-interference ability.

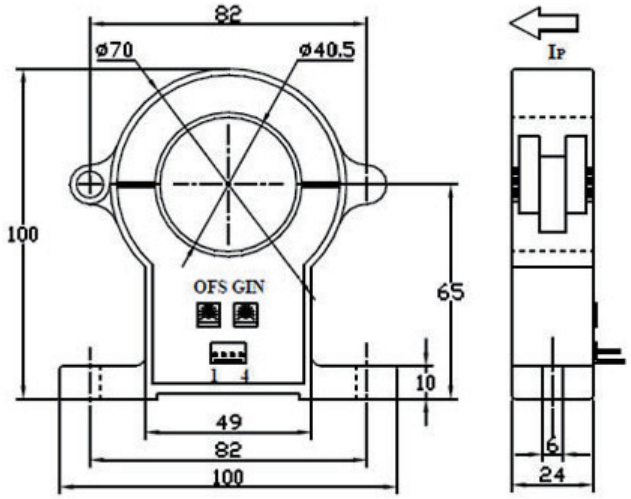
Features

1. UL, CE mark;
2. Frequency ~20KHz Bandwidth;
3. Holding wire diameter: ϕ40mm;
4. Conforms to EN 61010, 600V CAT III;
5. Measurement range up to 800A AC/DC;
6. Low phase shift for power measurement;
7. High precision 1% for current measurement;
8. It can customized 4V/5V/4-20mA DC output;
9. Improved ergonomic design & easy operation;
10. IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC 61869-2 etc standard;

Appliations

1. Rail;
2. UPS;
3. SMPS;
4. Inverter;
5. DC energy meter;
6. Solar power plant;
7. Wind power plant;
8. Car battery management;
9. Energy management system;

Outline Drawing



Parameters

Technical parameters	
Ratio	1000:1, 2000:1(customized)
Accuracy Class	1%
Primary current	100A/200A/300A/400A/500A/600A/800A AC/DC
Signal output	20mV/A, 25mV/A
Secondary voltage	0 - 4V DC, 0 - 5V DC;
Secondary current	4-20mA DC
Max. Cont. Input current	800A
Load Resistance	≥10KΩ
Over voltage category	CAT Ⅲ 600V
Frequency range	0Hz-20KHz
Response time	≤7μs
Dielectric strength	3KV 50Hz/60Hz at 1minute
Voltage maladjustment	≤±25mV
Temperature drift	<±1mV/℃
Power consumption	≤25mA
Max. voltage not insulated conductors	720 V
Standard	EN 61010-1, EN 61010-2-032, EN 61010-2-031 SJ 20790-2000, 600V CAT Ⅲ

Technical parameters - continued	
Installation	clamp type
Range	100A, 200A optional
Power supply	±12V, ±15V
Output signal	4V, 5V, 4-20mA DC at nominal input current
Connector	4 Pin Terminal Block
Mechanical parameters	
Dimensions (L x W x H) (mm)	100 x 100 x 24
Weight (g)	300
Holding wire diameter (mm)	φ40
Max. jaw opening (mm)	40
Jaw color	Black
Material	PC+ABS+Polycarbonate, UL94 V0
Operating conditions	
Operating temperature	-25°C to +85°C
Daily average temp	<+40°C
Storage temperature	-40°C to +100°C
Environment	indoors
Altitude	<3500 meters
Condition	No existence of severely begrimed, erosive and radioactive gas in the air. Permission of long-term operation under rated current.

Selection Guide

Model	Rate Current	Max Current	Secondary signal	Burden Resistance	Accuracy
FU-HSR-20	100A, 200A	300A	0 - 4V / 0 - 5V DC; 4-20mA	≥10KΩ	1%
FU-HSR-40	100A, 200A, 300A, 400A, 500A, 600A, 700A, 800A	800A	0 - 4V / 0 - 5V DC; 4-20mA	≥10KΩ	1%
FU-HSF-60	200A, 300A, 400A, 500A, 600A, 700A, 800A, 900A, 1000A, 1500A	1500A	0 - 4V / 0 - 5V DC; 4-20mA	≥10KΩ	1%

Notes: Can be customized clamp on current transformers according to user requirements!