

FU-HSF-60

HIGH QUALITY RESIN CAST AC/DC HALL CURRENT SENSOR 1500A

Our Hall-effect current sensors provide high accuracy combined with low drift, enabling accurate current measurements over both time and temperature. Additionally, our Hall-effect current sensors offer high working voltage levels with different levels of isolation to help address varying use-case conditions.

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

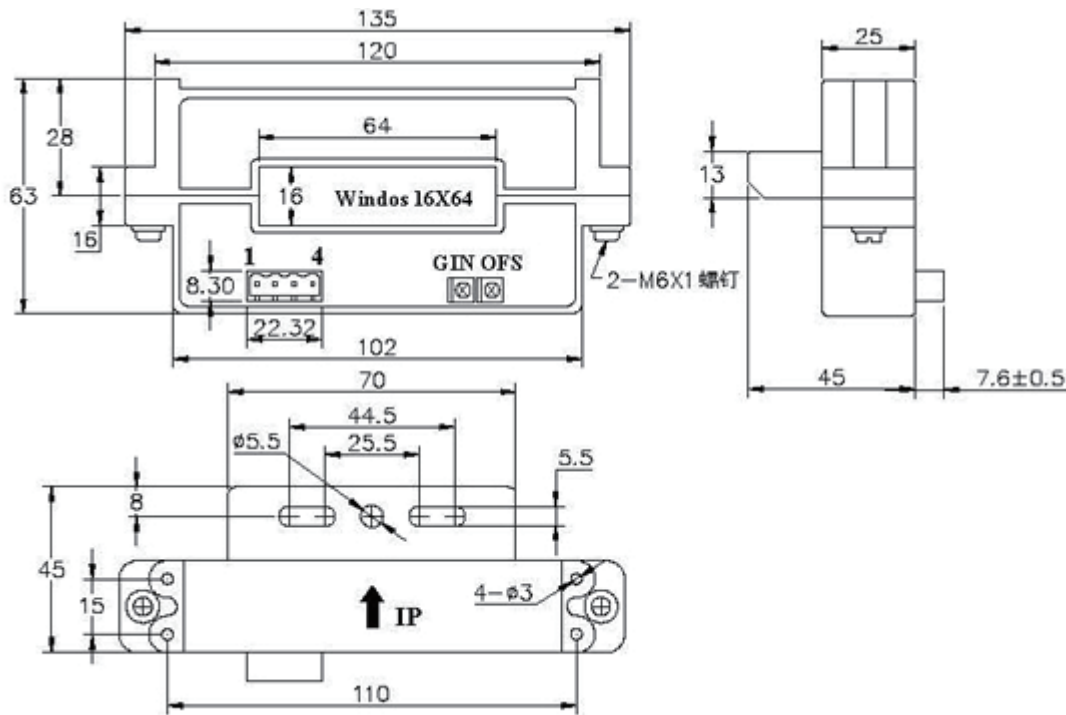
1. UL, CE mark;
2. Frequency ~20KHz Bandwidth;
3. Holding wire diameter: $\phi 64 \times 16\text{mm}$;
4. Conforms to EN 61010, 600V CAT III;
5. Measurement range up to 1500A AC/DC;
6. Low phase shift for power measurement;
7. High precision 1% for current measurement;
8. It can customized 4V/5V/4-20mA DC output;
9. Improved ergonomic design & easy operation;
10. IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC 61869-2 etc standard;



Applications

- | | |
|------------------------------|----------------------------|
| 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 | 300A/400A/500A/600A/800A/1000A/1500A 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 | 1500A |
| Load Resistance | ≥10KΩ |
| Over voltage category | CAT III 600V |
| Frequency range | 0Hz-20KHz |
| Response time | ≤7μs |
| Dielectric strength | 5KV 50Hz/60Hz at 1minute |
| Voltage maladjustment | ≤±30mV |
| Temperature drift | <±1mV/°C |
| Power consumption | ≤25mA |

| Technical parameters - continued | |
|---------------------------------------|---|
| 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 |
| Installation | Square type |
| Range | 500A, 1000A, 1500A 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) | 135 x 63 x 25 |
| Weight (g) | 450 |
| Holding wire diameter (mm) | φ64 x 16 |
| Max. jaw opening (mm) | 64 x 16 |
| 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!