

D50

HALL EFFECT HIGH LINEARITY 0.1% 1000A AC/DC CURRENT CLAMP

The round jaw design on the D50 series hall effect current clamp along with the high content permalloy core makes them well suited for power quality applications where high linearity and low phase shift along with wide frequency are important from 10Hz to 200kHz. Measurement range is 0 to 500A or 0 to 1000A AC/DC. It designed for oscilloscopes, power quality analyzer, waveform displaying instruments, and other frequency sensitive displaying instruments with BNC inputs.

The Model D50 AC/DC hall effect current clamp is a portable 500A/1000Arms current probe with insulated BNC output cable that can accurately measure AC or DC current waveforms. The unit has proportional 1V or 2V output for direct readings on oscilloscopes from DC to 1MHz at -3dB. The D50 is power by a rechargeable multimeter battery or from a 5V or 9 V DC power signal cable. It is the perfect tool for most of the waveform displaying instruments.

Features

- 1. UL, CE CNAS mark;
- 2. High content permalloy core;
- 3. Holding wire diameter: φ52mm;
- 4. Frequency 10Hz-1MHz Bandwidth;
- 5. Conforms to EN 61010, 600V CAT III;
- 6. Frequency response from DC to 200 KHz;
- 7. Industrial design & beautiful appearance;
- 8. Low phase shift for power measurement;
- 9. Measurement range 0-500A/0-1000 AC/DC;
- 10. Improved ergonomic design & easy operation;
- 11. High precision 0.5% for DC current measurement;
- 12. Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters;



Application

- 1. Power meter;
- 3. Cable fault analysis;
- 5. Power load monitoring;
- 7. Energy meter calibrator;
- 9. Power quality analyzer(PQA);
- 11. Measuring around cable bundles;

- 2. Multimeter;
- 4. Large industrial loads;
- 6. Data logging/recording;
- 8. Power quality monitoring;
- 10. Power and harmonic meters;
- 12. Waveform analysis(oscilloscopes meter);



Parameters

| Electrical parameters | |
|---------------------------------------|--|
| Ratio | 1000: 1 , 2000:1 (customized) |
| Accuracy class | 0.2%, 0.5%, 1%, 2% |
| Primary current | 0 - 500A or 0-1000A AC/DC |
| Signal output | 1mV/A, 10mV/A |
| Secondary voltage | 0 - 1V or 0 - 2V AC/DC |
| Max. Cont. Input current | 1200A AC/DC |
| Load capacity | ≤20Ω, standard 4Ω |
| Over voltage category | CAT III 600V |
| Linearity | 0.1% |
| Frequency range | 10Hz-1MHz |
| Frequency response time | ≤10us |
| Phase Shift at 50/60Hz | ±1° |
| Dielectric strength | 3KV 50Hz/60Hz at 1minute |
| Temperature range | -40°C to +55°C |
| Output | 2.5 meter cable with D01 or BNC connector |
| Max. voltage not insulated conductors | 720 V |
| Power supply | 5V or 9V DC |
| Standard | EN 61010-1, EN 61010-2-032, EN 61010-2-031 |
| | IEC60044-1, & IEC61869-2, 600V CAT III |
| Installation | clamp type |
| Range | 10A, 100A, 1000A optional |
| Output mode | lead output(2.5m) |
| Pollution Degree | 2 |
| Protection | IP40 |
| Connector | BNC, 4mm banana, signal cable(4 cores), customized |
| Mechanical parameters | |
| Dimensions (L x W x H) (mm) | 105 x 218 x 30 |
| Weight (g) | 650 |
| Holding wire diameter (mm) | ф52 |
| Max. jaw opening (mm) | 52 |
| Jaw color | Red & Grey |
| Material | PC+ABS, UL94 V0 |
| | |