

D50

1MHz BANDWIDTH 500A 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 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: $\phi 52\text{mm}$;
4. Frequency 10Hz-1MHz Bandwidth;
5. Conforms to EN 61010, 600V CAT III;
6. Frequency response from DC to 200 KHz;
7. Low phase shift for power measurement;
8. Industrial design & beautiful appearance;
9. Measurement range 0-500A/0-1000 AC/DC;;
10. Improved ergonomic design & easy operation;
11. High precision 0.2% for DC current measurement;
12. Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters;



Applications

1. Multimeter;
2. Power meter;
3. Waveform analysis;
4. Cable fault analysis;
5. Oscilloscopes meter;
6. Battery load analysis;
7. Large industrial loads;
8. Data logging/recording;
9. Power load monitoring;
10. Energy meter calibrator;
11. Power quality monitoring;
12. Power quality analyzer(PQA);
13. Power and harmonic meters;
14. Measuring around cable bundles;

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	±0.1°
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)	φ52
Max. jaw opening (mm)	52
Jaw color	Red & Grey
Material	PC+ABS, UL94 V0

Selection guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
D50V1-100	100A	120A	1V	1000:1	customized	0.2%
D50V1-200	200A	240A	1V	1000:1	customized	0.2%
D50V1-500	500A	600A	1V	1000:1	customized	0.2%
D50V1-1000	1000A	1200A	1V	1000:1	customized	0.2%
D50V2-100	100A	120A	2V	2000:1	customized	0.2%
D50V2-200	200A	240A	2V	2000:1	customized	0.2%
D50V2-500	500A	600A	2V	2000:1	customized	0.2%
D50V2-1000	1000A	1200A	2V	2000:1	customized	0.2%
D50V3-1000	10/100/1000A	12/120/1200A	1V	1000:1	customized	0.2%
D50V15-100	100A	120A	1V	1000:1	customized	0.5%
D50V15-200	200A	240A	1V	1000:1	customized	0.5%
D50V15-500	500A	600A	1V	1000:1	customized	0.5%
D50V15-1000	1000A	1200A	1V	1000:1	customized	0.5%
D50V25-100	100A	120A	2V	2000:1	customized	0.5%
D50V25-200	200A	240A	2V	2000:1	customized	0.5%
D50V25-500	500A	600A	2V	2000:1	customized	0.5%
D50V25-1000	1000A	1200A	2V	2000:1	customized	0.5%
D50V35-1000	10/100/1000A	12/120/1200A	1V	1000:1	customized	0.5%
D50V11-100	100A	120A	1V	1000:1	customized	1%
D50V11-200	200A	240A	1V	1000:1	customized	1%
D50V11-500	500A	600A	1V	1000:1	customized	1%
D50V11-1000	1000A	1200A	1V	1000:1	customized	1%
D50V21-100	100A	120A	2V	2000:1	customized	1%
D50V21-200	200A	240A	2V	2000:1	customized	1%
D50V21-500	500A	600A	2V	2000:1	customized	1%
D50V21-1000	1000A	1200A	2V	2000:1	customized	1%
D50V31-1000	10/100/1000A	12/120/1200A	1V	1000:1	customized	1%

Notes: Can be customized current probe according to user requirements!