

D20

200A AC/DC CURRENT SENSOR

The Model D20 AC/DC current sensor is a portable 100A/200Arms current clamp with insulated BNC output cable that can accurately measure AC or DC current waveforms. The unit has proportional mV output for direct readings on oscilloscopes from DC to 1MHz at -3dB. The D20 is power by a rechargeable multimeter battery or from a 9 V power signal cable. It is the perfect tool for most of the oscilloscopes.

The D20 current sensor is a general purpose 200A AC/DC current probe designed for use with DMMs, oscilloscopes, power loggers, multimeters and energy meter calibration instruments that have a current input. It has a 1000:1 ratio and output of 10mV per amp measured in the jaw. The D20 AC/DC current sensor has an integral 2.5m lead terminated. The rounded jaw design on this current clamp makes it well-suited for power applications where high linearity 0.1% and low phase shift and wide frequency response up to 200kHz are important.

Features

1. UL, CE, CNAS mark;
2. 10mV/A output signal;
3. Frequency 1MHz Bandwidth;
4. With harmonic measurement;
5. Holding wire diameter: $\phi 20\text{mm}$;
6. Conforms to EN 61010, 600V CAT III;
7. Frequency response from DC to 200 KHz;
8. Low phase shift for power measurement;
9. High content nickel metal permalloy core;
10. Measurement range 0-100A/0-200 AC/DC;
11. Improved ergonomic design & easy operation;
12. High precision 0.1% for DC current measurement;
13. Automatic compensation for earth's magnetic influence;
14. Designed for DMMs, oscilloscopes, recorders, loggers, harmonic meters;



Application

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|-----------------------|-----------------------------|---|
| 1. Multimeter; | 5. Battery load analysis; | 9. Power quality analyzer(PQA); |
| 2. Power meter; | 6. Power load monitoring; | 10. Power and harmonic meters; |
| 3. Oscilloscopes; | 7. Data logging/recording; | 11. Measuring around cable bundles; |
| 4. Energy sub-meters; | 8. Energy meter calibrator; | 12. Waveform analysis(oscilloscopes meter); |

Parameters

Electrical parameters	
Ratio	1000: 1 or 2000:1 (customized)
Accuracy class	0.2%, 0.5%, 1%, 2%
Primary current	0 - 100A or 0-200A AC/DC
Signal output	10mV/A or 1mV/A
Secondary voltage	0 - 1V or 0 - 2V AC/DC
Max. Cont. Input current	200A AC/DC
Load capacity	$\leq 20\Omega$, Standard 4Ω
Over voltage category	CAT III 600V
Linearity	0.1%
Frequency range	10Hz-1MHz
Frequency response time	$\leq 10\mu s$
Phase Shift at 50/60Hz	$\pm 0.1^\circ$
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-40°C to +55°C
Output	2.5 meter cable with D01 or BNC connector, 4mm banana
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
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)	53 x 138 x 28
Weight (g)	420
Holding wire diameter (mm)	$\phi 20$
Max. jaw opening (mm)	20
Jaw color	Red, black
Material	PC+ABS, UL94 V0

Selection Guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
D20V1-100	100A	120A	1V	1000:1	customized	0.2%
D20V1-200	200A	240A	1V	1000:1	customized	0.2%
D20V2-100	100A	120A	2V	2000:1	customized	0.2%
D20V2-200	200A	240A	2V	2000:1	customized	0.2%
D20V15-100	100A	120A	1V	1000:1	customized	0.5%
D20V15-200	200A	240A	1V	1000:1	customized	0.5%
D20V25-100	100A	120A	2V	2000:1	customized	0.5%
D20V25-200	200A	240A	2V	2000:1	customized	0.5%
D20V11-100	100A	120A	1V	1000:1	customized	1%
D20V11-200	200A	240A	1V	1000:1	customized	1%
D20V21-100	100A	120A	2V	2000:1	customized	1%
D20V21-200	200A	240A	2V	2000:1	customized	1%

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