

HQ15

5A & 100A HIGH PRECISION CURRENT PROBE SENSOR

The HQ15 100a current probe sensor is designed for easy installed in tight spaces and without the need for dismantling the primary busbar or cables. The sensing head uses sliding push-fit clamp structure, safety isolation to avoid the user to contact with charged objects directly. It complies with CE standards and meets 300V CAT III safety class. This model HQ15 current sensor is a high accuracy mini current probe for measurements up to 130A AC. This current probe uses a special magnetic core to provide higher accuracy and lower phase shift. The HQ15 Series is an excellent probe sensor to be used in power and low level current measurement applications.

Application

1. Power meter;
2. Energy sub-meters;
3. Phase angle meter;
4. Waveform analysis;
5. Oscilloscopes meter;
6. Data logging/recording;
7. Power load monitoring;
8. Energy meter calibrator;
9. Power quality monitoring;
10. Power quality analyzer(PQA);
11. Power and harmonic meters;
12. CT secondary current detection;



Features

1. Excellent linearity;
2. UL, CE CNAS mark;
3. High content permalloy core;
4. Holding wire diameter: $\phi 15\text{mm}$;
5. High time harmonics measurement;
6. Frequency 10Hz-5kHz Bandwidth;
7. Easy & quick installation in tight spaces;
8. EN 61010-2-032 , 300V CAT III Standard;
9. Low phase shift for power measurement;
10. Measurement range of 1mA to 130A AC;
11. Improved ergonomic design & easy operation;
12. High precision 0.1% for current measurement;
13. Designed for DMMs, loggers, oscilloscopes, power & harmonic meters;
14. Flexible and light weights, exquisite appearance;

Parameters

Electrical parameters

Ratio	1000: 1 , 2000:1, 2500:1 (customized)
Accuracy class	0.1%, 0.2%
Primary current	0 - 5A AC and 0-100A AC
Signal output	10mV/A, 1mV/A, 1mA/A
Secondary voltage	0 - 0.05V AC, 0 - 0.1V AC, 0 - 1V AC;
Secondary current	0-5mA or 0-100mA AC
Max. Cont. Input current	130A
Load capacity	$\leq 10\Omega$, standard 4Ω
Over voltage category	CAT III 600V
Frequency range	40Hz-5KHz
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	600 V
Standard	EN 61010-1, EN 61010-2-032, EN 61010-2-031 IEC60044-1, & IEC61869-2, 600V CAT III
Installation	clamp type
Range	5A, 10A, 100A optional
Output mode	lead output(2.5m)
Connector	4mm banana, BNC, signal cable(2 cores),customized

Accuracy (100A Range)

0-100mA	$\leq 0.5\%$
100mA-1A	$\leq 0.2\%$
1-130A	$\leq 0.1\%$

Phase Shift(100A Range)

0-100mA	$\leq 0.5^\circ$
100mA-10A	$\leq 0.2^\circ$
10-130A	$\leq 0.1^\circ$

Mechanical parameters

Dimensions (L x W x H) (mm)	46 x 162 x 25
Weight (g)	320
Holding wire diameter (mm)	$\phi 15$
Max. jaw opening (mm)	13
Jaw color	Black
Material	PC+ABS, UL94 V0

Selection guide

Model	Rate Current	Max Current	Secondary	Coil Ratio	Burden Resistance	Accuracy
HQ15V-5	5A	50A	50mV	2000:1	customized	0.1%
HQ15V-10	10A	50A	100mV	2000:1	customized	0.1%
HQ15V-20	20A	50A	200mV	2000:1	customized	0.1%
HQ15V-100	100A	130A	1V	2000:1	customized	0.1%
HQ15V1-100	100A	130A	100mV	2000:1	customized	0.1%
HQ15V2-100	100A	130A	2V	2000:1	customized	0.1%
HQ15V3-100	100A	130A	5V	2000:1	customized	0.1%
HQ15A-5	5A	6A	2.5mA	2000:1	customized	0.1%
HQ15A-10	10A	12A	5mA	2000:1	customized	0.1%
HQ15A-20	20A	24A	10mA	2000:1	customized	0.1%
HQ15A-100	100A	130A	50mA	2000:1	customized	0.1%
HQ15A1-5	5A	6A	5mA	1000:1	customized	0.1%
HQ15A1-10	10A	12A	10mA	1000:1	customized	0.1%
HQ15A1-20	20A	24A	20mA	1000:1	customized	0.1%
HQ15A1-100	100A	130A	100mA	1000:1	customized	0.1%
HQ15A2-100	100A	130A	40mA	2500:1	customized	0.1%