

## HQ15

### 5A 100A HIGH-VALUE VOLTAGE OUTPUT AC CURRENT CLAMP SENSOR

The HQ15 100a current clamp 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 AC current sensor is a high accuracy mini current clamp 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 current clamp is an excellent probe sensor to be used in power and low level current measurement applications.

## Features

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



## Application

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

## Parameters

Electrical parameters		
Model	HQ15-A5	HQ15-A100
Rated primary current	5A AC	100A AC
Output Voltage	10 mV AC/A	mV AC/A
Maximum input current	50A AC (Continuous) (45-66Hz,Ambient temp.50°C)	130A AC (Continuous)
Amplitude accuracy	±0.3%RD±0.02%FS (10%-100%I1n),(45Hz- 66Hz)	
Phase accuracy	±0.2° (10%-100%I1n)(45Hz-5kHZ)	
The amplitude frequency characteristic	±0.1% (45Hz-5kHZ)(Deviation accuracy)	
Conductor impact	±0.5 (Off-center)	
The influence of external lectromagnetic fields	≤0.1A (In AC 400A / m electromagnetic fields)	
Temperature coefficient	±0.02%/°C of the reading data	
Dielectric strength	3000 V AC rms/Continue 15 seconds(Circuits-iron core, iron core-shell)	
The maximum rated voltage	300V AC rms	
Connector	4mm banana, BNC, signal cable(2 cores),customized	
Applicable standards	Safety: EN61010-2-032:2002,EN 61010-1, EN 61010-2-031, 600V CAT III,	
Accuracy (100A Range)		
0-100mA	≤0.5%	
100mA-1A	≤0.2%	
1-130A	≤0.1%	
Phase Shift(100A Range)		
0-100mA	≤0.5°	
100mA-10A	≤0.2°	
10-130A	≤0.1°	
Mechanical parameters		
Measurable conductor diameter	Max.15mm	
Cable length	About 3m	
Dimension (W x H x D)	About 46×162×25 (Excluding protruding parts)	
Weight	About 320g	
Jaw color	Black	
Material	PC+ABS, UL94 V0	
Environmental conditions		
Operating temperature	0 to 50°C (32-122°F)	
Operating humidity	≤80%RH(No condensate)	
Storage temperature	-10 to 60°C (14-140°F)	
Storage humidity	≤80%RH(No condensate)	
Operating environment	Indoor, altitude up to 2000 meters	

## 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%