

HQ15

HQ15 POWER QUALITY 5A/100A SPLIT CORE AC CLAMP ON CURRENT PROBE

The HQ15 100A clamp on current probe 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 split core current probe 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 AC current probe is an excellent probe sensor to be used in power and low level current measurement applications. All of our clamp-on current probe are strictly comply IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, GB1208-2006, GB/T 20840.1-2010, GB/T 20840.2-2014, GB/T 22071.1-2018.

Features

1. Measurement range of 1mA to 130A AC;
2. High precision 0.1% for current measurement;
3. Suitable for 5A, 10A, 20A, 50A, 100A cable online measurement;
4. IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC 61869-2 etc standard;
5. 10Hz to 5kHz response;
6. 1mA/A, 1mV/A or 10mV/A AC output signals;
7. Low phase shift for power measurement;
8. High time harmonics measurement;
9. Improved ergonomic design and easy operation;
10. High content nickel metal core;
11. Small, compact size;
12. Easy & quick installation in tight spaces;
13. Excellent linearity;
14. Holding wire diameter: $\phi 15\text{mm}$;
15. Installation: clamp type design;
16. Designed for DMMs, recorders, oscilloscopes, power & harmonic meters;
17. Designed to EN 61010, 600V CAT III safety standard;
18. UL, CE, CNAS mark;
19. As a high accuracy clamp-on current probe;
20. Can be customized 4mm banana/BNC connector;



Application

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

Parameters

Technical parameters	
Ratio	1000:1, 2000:1, 2500:1 (customized)
Accuracy Class	0.1%, 0.2%
Primary current	0 - 5A AC, 0 - 100A AC
Signal output	1mA/A, 1mV/A, 5mV/A, 10mV/A
Secondary voltage	0 - 50mV, 0-100mV, 0-200mV, 0-1V, 0-5V AC (customized)
Secondary current	0 - 2.5mA, 0-5mA, 0-10mA, 0-100mA AC (customized)
Max. Cont. Input current	50A, 130A
Load capacity	≤20Ω, standard 4Ω
Over voltage category	CAT III 600V
Frequency range	10Hz-5kHz
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-20°C to +55°C
Output	2.5 meter cable with D01 or BNC connector
Max. voltage not insulated conductors	720 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, 100A optional
Output mode	Lead output(2.5m, 5m, 10m or customized)
Output signal	333mV, 50mV, 1V, 2V, 5V AC at nominal input current
Connector	BNC, 4mm banana, signal cable(2 cores), Audio plug, customized
Accuracy (5A/100A Range)	
0-100mA	≤0.5%
100mA-1A	≤0.2%
1A-130A	≤0.1%

Phase Shift(5A/100A Range)	
0-100mA	≤0.5°
100mA-10A	≤0.2°
10A-130A	≤0.1°
Mechanical parameters	
Dimensions (L x W x H) (mm)	45 x 160 x 25
Weight (g)	300
Holding wire diameter (mm)	φ15
Max. jaw opening (mm)	15
Jaw color	black
Material	PC+ABS+Polycarbonate, 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 Current	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%

Notes: Can be customized clamp on current transformers according to user requirements!

Clamp On Current Transformer Selection Model

Model	Current Range	Max Current	Secondary Output Signal	Ratio	Resistance	Accuracy
S50	0-1200A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
S120	0-3000A	3600A	250mA, 500mA, 1A, 2A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P8	0-10A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1, 4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P18	0-200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1, 4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P50	0-1000A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P110	0-1500A	1500A	250mA, 500mA, 1A, 2A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q8A1	20A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q8A2	20A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q13	100A	120A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q20A	200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q20B	200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q40	500A	600A	200mA, 250mA, 500mA, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q50A	1000A	1000A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q70	1000A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q110	1500A	1500A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q125	2000A	2400A	500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
Q125B	3000A	3600A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
Q150	3000A	3600A	500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
XQ13	100A	120A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
XQ20	200A	240A	2mA, 2.5mA, 5mA, 10mA,20mA, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
HQ15	100A	130A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%