

## Q8A-1

### HIGH PRECISION NICKEL METAL CORE AC CLAMP ON CURRENT PROBE

The model Q8A1 clamp on current probe/clamp on ct is based on AC transformer technology for use in measurement of AC current, it is suitable for 5A, 10A cable online measurement. With measurement range of 1 mA to 20A AC and frequency range from 40Hz to 2MHz, it has a high accuracy class of 0.1%. It suits for oscilloscope, power quality analyzer, electric energy meter calibrator etc. Easy to operate everywhere. its technical standard according to EN 61010-1, EN 61010-2-032, IEC60044-1. This model Q8A1 clamp on current probe have been used in many instrument manufacturers and measurement small current of ammeter recorder.

### Features

1. UL, CE, CNAS mark;
2. Holding wire diameter:  $\phi 8\text{mm}$ ;
3. Installation: clamp type design;
4. 2-128th harmonic measurement;
5. Frequency 10Hz-2MHz Bandwidth;
6. Measurement range of 1mA to 12A AC;
7. Low phase shift for power measurement;
8. High content nickel metal permalloy core;
9. Conforms to EN 61010-2-032, 600V CAT III;
10. Min 1mA for leakage current measurement;
11. High precision 0.1% for current measurement;
12. Improved ergonomic design & easy operation;
13. Can be customized 4mm banana/BNC connector;
14. Designed for DMMs, recorders, oscilloscopes, harmonic meters etc.;



### Application

- |                                    |                                 |  |
|------------------------------------|---------------------------------|--|
| 1. Power meter;                    | 6. Energy sub-meters;           | 10. Digital multi-meter;               |
| 2. Oscilloscopes meter;            | 7. Power quality analyzer;      | 11. Leakage current meter;             |
| 3. Data logging/recording;         | 8. Phase volt-ampere meter;     | 12. Power quality monitoring;          |
| 4. Power and harmonic meters;      | 9. Multi-function energy meter; | 13. Energy meter calibrator (on site); |
| 5. CT secondary current detection; |                                 |  |

## Parameter

Electrical parameters	
Ratio	1000: 1, 2000:1 or 2500:1 (customized)
Accuracy class	0.1 %,0.2%
Primary current	0 - 5A AC, 0 - 10A AC, 0 - 20A AC
Secondary current	0 - 2.5mA, 0-5mA, 0-10mA, 0-20mA AC (customized)
Secondary voltage	0 - 50mV, 0-100mV, 0-200mV, 0-1V, 0-5V AC (customized)
Max. Cont. Input current	24A
Load capacity	≤20Ω, Standard 4Ω
Over voltage category	CAT III 600V
Output signal (AC current)	From 0 to 10mA AC at nominal input current
Output signal (AC voltage)	From 0 to 100mV AC at nominal input current
Signal ratio	1mA/A, 1mV/A, 10mV/A, 100mV/A
Frequency range	10Hz-2MHz
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-20°C to +55°C
Output	2.5 meter cable with D01 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
Output mode	Lead output (2.5m)
Connector	BNC, 4mm banana, Audio plug,customized
Mechanical parameters	
Dimensions (L x W x H) (mm)	42.6x122.5x23
Weight (g)	250
Holding wire diameter (mm)	φ8
Max. jaw opening (mm)	8
Color	Black
Material	PC+ABS+Polycarbonate, UL94 V0

## Selection Guide

Model	Rate Current	Max Current	Secondary	Coil Ratio	Burden Resistance	Accuracy
Q8A1-1-1	1A	1.2A	1mA	1000:1	customized	0.1%
Q8A1-1-2	1A	1.2A	0.5mA	2000:1	customized	0.1%
Q8A1-5-1	5A	6A	5mA	1000:1	customized	0.1%
Q8A1-5-2	5A	6A	2.5mA	2000:1	customized	0.1%
Q8A1-5-3	5A	6A	2mA	2500:1	customized	0.1%
Q8A1-10-1	10A	12A	10mA	1000:1	customized	0.1%
Q8A1-10-2	10A	12A	5mA	2000:1	customized	0.1%
Q8A1-10-3	10A	12A	4mA	2500:1	customized	0.1%
Q8A1-20-1	20A	24A	20mA	1000:1	customized	0.1%
Q8A1-20-2	20A	24A	10mA	2000:1	customized	0.1%
Q8A1-V5-1	5A	6A	50mV	1000:1	customized	0.1%
Q8A1-V5-2	5A	6A	500mV	1000:1	customized	0.1%
Q8A1-V5-3	5A	6A	1V	1000:1	customized	0.1%
Q8A1-V10-1	10A	12A	100mV	1000:1	customized	0.1%
Q8A1-V10-2	10A	12A	1V	1000:1	customized	0.1%
Q8A1-V10-3	10A	12A	5V	1000:1	customized	0.1%
Q8A1-1-12	1A	1.2A	1mA	1000:1	customized	0.2%
Q8A1-1-22	1A	1.2A	0.5mA	2000:1	customized	0.2%
Q8A1-5-12	5A	6A	5mA	1000:1	customized	0.2%
Q8A1-5-22	5A	6A	2.5mA	2000:1	customized	0.2%
Q8A1-10-12	10A	12A	10mA	1000:1	customized	0.2%
Q8A1-10-22	10A	12A	5mA	2000:1	customized	0.2%
Q8A1-10-32	10A	12A	4mA	2500:1	customized	0.2%
Q8A1-20-12	20A	24A	20mA	1000:1	customized	0.2%
Q8A1-20-22	20A	24A	10mA	2000:1	customized	0.2%
Q8A1-V5-12	5A	6A	50mV	1000:1	customized	0.2%
Q8A1-V5-22	5A	6A	500mV	1000:1	customized	0.2%
Q8A1-V5-32	5A	6A	1V	1000:1	customized	0.2%
Q8A1-V10-12	10A	12A	100mV	1000:1	customized	0.2%
Q8A1-V10-22	10A	12A	1V	1000:1	customized	0.2%
Q8A1-V10-32	10A	12A	5V	1000:1	customized	0.2%

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