

## Q8A-2

### 10A HIGH SENSITIVITY 0.1% PERMALLOY CORE CT AC CURRENT CLAMP

AC Current clamps are devices with jaws that open up and clamp around an electrical conductor to measure current. They are very useful as they allow you to clip the probe around an existing conductor without having to disconnect and reroute cables. AC Current clamps will read the magnitude of alternating current (AC) as well as the phase shift and waveform.

The model Q8A2 permalloy core ac current clamp ct with high accuracy up to 0.1% has been designed for use with energy meter tester, multimeters, recorders, power analyzers, safety testers etc. It has low phase shift for power measurement, greatly suitable for electric energy meter calibrator and oscilloscope. This Q8A2 clamp ct can convert 0 - 10A AC current to 0 - 10mA AC current with real shape, max 20A measurement, but with harmonic measurement function. It is suitable for leakage current measurement in the field.

## Features

1. UL, CE, CNAS mark;
2. Holding wire diameter:  $\phi 8\text{mm}$ ;
3. Frequency 10Hz-2MHz Bandwidth;
4. High times harmonic measurement;
5. Conforms to EN 61010, 600V CAT III;
6. Measurement range of 1mA to 20A AC;
7. Low phase shift for power measurement;
8. High content nickel metal permalloy core;
9. Min 1mA for leakage current measurement;
10. High precision 0.1% for current measurement;
11. Improved ergonomic design & easy operation;
12. Designed for DMMs, recorders, oscilloscopes, power meters etc.;



## Application

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

## Parameter

Electrical parameters	
Ratio	1000: 1, 2000:1 or 2500:1 (customized)
Accuracy	0.1 %,0.2%
Primary current	0 - 5A AC, 0 - 10A AC, 0 - 20A AC
Secondary current	0 - 10mA AC or 0 - 100mV AC (customized)
Max. Cont. Input current	6A, 12A, 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 1 minute
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), 5m or customized
Connector	BNC, 4mm banana, Audio plug, customized
Mechanical parameters	
Dimensions (L x W x H) (mm)	45x158x25
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
Q8A2-1-1	1A	1.2A	1mA	1000:1	customized	0.1%
Q8A2-1-2	1A	1.2A	0.5mA	2000:1	customized	0.1%
Q8A2-5-1	5A	6A	5mA	1000:1	customized	0.1%
Q8A2-5-2	5A	6A	2.5mA	2000:1	customized	0.1%
Q8A2-5-3	5A	6A	2mA	2500:1	customized	0.1%
Q8A2-10-1	10A	12A	10mA	1000:1	customized	0.1%
Q8A2-10-2	10A	12A	5mA	2000:1	customized	0.1%
Q8A2-10-3	10A	12A	4mA	2500:1	customized	0.1%
Q8A2-20-1	20A	24A	20mA	1000:1	customized	0.1%
Q8A2-20-2	20A	24A	10mA	2000:1	customized	0.1%
Q8A2-V5-1	5A	6A	50mV	1000:1	customized	0.1%
Q8A2-V5-2	5A	6A	500mV	1000:1	customized	0.1%
Q8A2-V5-3	5A	6A	1V	1000:1	customized	0.1%
Q8A2-V10-1	10A	12A	100mV	1000:1	customized	0.1%
Q8A2-V10-2	10A	12A	1V	1000:1	customized	0.1%
Q8A2-V10-3	10A	12A	5V	1000:1	customized	0.1%
Q8A2-1-12	1A	1.2A	1mA	1000:1	customized	0.2%
Q8A2-1-22	1A	1.2A	0.5mA	2000:1	customized	0.2%
Q8A2-5-12	5A	6A	5mA	1000:1	customized	0.2%
Q8A2-5-22	5A	6A	2.5mA	2000:1	customized	0.2%
Q8A2-10-12	10A	12A	10mA	1000:1	customized	0.2%
Q8A2-10-22	10A	12A	5mA	2000:1	customized	0.2%
Q8A2-10-32	10A	12A	4mA	2500:1	customized	0.2%
Q8A2-20-12	20A	24A	20mA	1000:1	customized	0.2%
Q8A2-20-22	20A	24A	10mA	2000:1	customized	0.2%
Q8A2-V5-12	5A	6A	50mV	1000:1	customized	0.2%
Q8A2-V5-22	5A	6A	500mV	1000:1	customized	0.2%
Q8A2-V5-32	5A	6A	1V	1000:1	customized	0.2%
Q8A2-V10-12	10A	12A	100mV	1000:1	customized	0.2%
Q8A2-V10-22	10A	12A	1V	1000:1	customized	0.2%
Q8A2-V10-32	10A	12A	5V	1000:1	customized	0.2%

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