

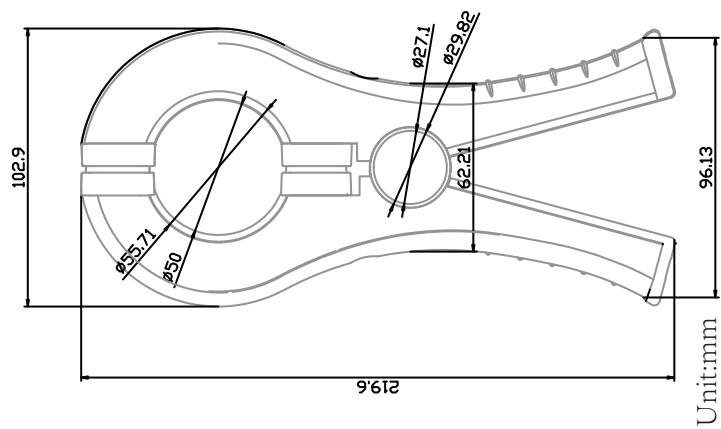
# **Q50A**

## 1000A/1A WIDE RANGE MEASURING AC CURRENT PROBE

The model Q50A current probe is designed for fast and easy measure the current in industrial and power environment, it has wide range of current measurement from 1mA to 1000A, High precision 0.1%, easy operation for measurement instruments. Meet EN61010-2-032 standard. The Q50A AC current clamp are designed to extend the current measuring capabilities of DMMs or BNC, power instruments, oscilloscopes, hand-held scopes, recorders or loggers, clamp type grounding resistance tester, double clamp phase angle meter, energy meter calibrator and other diverse instruments.

### **Application**

- 1. Power meter;
- 2. Energy sub-meters;
- 3. Digital multi-meter;
- 4. Cable fault analysis;
- 5. Oscilloscopes meter;
- 6. Large industrial loads;
- 7. Earth resistance meter;
- 8. Power quality analyzer;
- 9. Power load monitoring;
- 10. Data logging/recording;
- 11. Phase volt-ampere meter;
- 12. Power quality monitoring;
- 13. Power and harmonic meters;
- 14. Multi-function energy meter;
- 15. CT secondary current detection;
- 16. Measuring around cable bundles;
- 17. Electric energy meter tester (on site);



### **Features**

- 1. UL, CE CNAS mark;
- 2. High content permalloy core;
- 3. Holding wire diameter:  $\phi 50\text{mm}$ ;
- 4. Frequency 40Hz-20kHz Bandwidth;
- 5. Conforms to EN 61010, 600V CAT III;
- 6. Industrial design & beautiful appearance;

## Features

- 7. Low phase shift for power measurement;
- 9. High precision 0.1% for current measurement;
- 11. Designed for recorders, loggers, oscilloscopes, power and harmonic meters;
- 8. Measurement range of 1mA to 1000A AC;
- 10. Improved ergonomic design & easy operation;

## Parameters

### Electrical parameters

Ratio	1000:1 or 2000:1 (customized)
Accuracy class	0.1%, 0.2%, 0.5%
Primary current	0 - 1000A AC
Secondary current	0-1A AC, 0 - 5A AC (customized)
Max. Cont. Input current	1200A
Load capacity	$\leq 20\Omega$ , standard $4\Omega$
Over voltage category	CAT III 600V
Output signal	500mA, 1A, 5A AC at nominal input current
Frequency range	40Hz-20kHz
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)
Connector	BNC, 4mm banana, signal cable(2 cores), customized

### Accuracy (1000A Range)

0-10A	$\leq 0.5\%$
10-100	$\leq 0.2\%$
10-1000A	$\leq 0.1\%$

### Phase Shift (1000A Range)

0-10A	$\leq 0.5^\circ$
10-100	$\leq 0.2^\circ$
100-1000A	$\leq 0.1^\circ$

### Mechanical parameters

Dimensions (L x W x H) (mm)	102.9 x 219.6 x 28
Weight (g)	550
Holding wire diameter (mm)	$\phi 50$

**Mechanical parameters - continued**

Max. jaw opening (mm)	50
Jaw color	Blue or grey
Material	PC+ABS+Polycarbonate, UL94 V0

## Selection guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
Q50A5-200	200A	240A	5A	40:1	2.5VA	0.5%
Q50A5-300	300A	360A	5A	60:1	2.5VA	0.5%
Q50A5-400	400A	480A	5A	80:1	2.5VA	0.5%
Q50A5-500	500A	600A	5A	100:1	2.5VA	0.5%
Q50A5-600	600A	720A	5A	120:1	2.5VA	0.5%
Q50A5-800	800A	960A	5A	160:1	2.5VA	0.5%
Q50A5-1000	1000A	1200A	5A	200:1	2.5VA	0.5%
Q50A1-100	100A	120A	1A	100:1	customized	0.2%
Q50A1-200	200A	240A	1A	200:1	customized	0.2%
Q50A1-300	300A	360A	1A	300:1	customized	0.2%
Q50A1-400	400A	480A	1A	400:1	customized	0.2%
Q50A1-500	500A	600A	1A	500:1	customized	0.2%
Q50A1-600	600A	720A	1A	600:1	customized	0.2%
Q50A1-800	800A	960A	1A	800:1	customized	0.2%
Q50A1-1000	1000A	1000A	1A	1000:1	customized	0.1%
Q50A2-250	250A	300A	250mA	1000:1	customized	0.1%
Q50A2-300	300A	360A	300mA	1000:1	customized	0.1%
Q50A2-500	500A	600A	500mA	1000:1	customized	0.1%
Q50A2-1000	1000A	1000A	500mA	2000:1	customized	0.1%
Q50A3-500	500A	600A	200mA	2500:1	customized	0.1%
Q50A3-800	800A	960A	400mA	2000:1	customized	0.1%
Q50A3-1000	1000A	1000A	400mA	2500:1	customized	0.1%
Q50A4-500	500A	600A	250mA	2000:1	customized	0.1%
Q50A4-1000	1000A	1000A	250mA	4000:1	customized	0.1%
Q50A6-1000	1000A	1000A	200mA	5000:1	customized	0.1%