

P110

HIGH ACCURACY 1000A CABLE FAULT ANALYSIS CURRENT TRANSFORMER CLAMP

The P110 is a high performance AC current transformer Clamp with excellent transformation and low phase shift. The high quality magnetic permalloy core and uniform windings provide for accurate measurements up to 1000AAC/600AAC/250AAC. The "ring type" jaw permits good magnetic conduction and cable positionings. Provide excellent RMS capabilities and reliable signal reproduction. It is well suited for power quality applications where high accuracy and low phase shift along with wide frequency from 10Hz to 2MHz are important. Measurement range is 1mA to 1200A. The P110 CT clamp is a general purpose 1000A AC current probe designed for use with DMMs, cable fault analysis and loggers instruments that have a current input. It has a 1000:1 ratio and output of 1mA per amp or 1mV per amp measured in the jaw. The P110 current transformer clamp has an integral 2.5m or 5m lead terminated. The rounded jaw design on this probe makes it well-suited for cable fault analysis applications where high accuracy and low phase shift and wide frequency.

All of our current transformer clamp are strictly comply 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, IEC/EN61010-2-032, IEC/EN 61010-2-031.

Features

1. UL, CE CNAS mark;
2. High content permalloy core;
3. 1mA/A or 1mV/A signal output;
4. Holding wire diameter: $\phi 110\text{mm}$;
5. Frequency 10Hz-2MHz Bandwidth;
6. Conforms to EN 61010, 600V CAT III;
7. Low phase shift for power measurement;
8. Industrial design & beautiful appearance;
9. Measurement range of 1mA to 1500A AC;
10. As a high accuracy current transformer clamp;
11. Improved ergonomic design & easy operation;
12. High precision 0.1% for current measurement;
13. Large jaw opening accommodates conductors up to two 500kcoil;
14. IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC 61869-2 etc standard;
15. Designed for recorders, loggers, oscilloscopes, power and harmonic meters;



Applications

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|----------------------------------|-------------------------------------|--------------------------------|
| 1. Multimeter; | 2. Waveform analysis; | 3. Digital multi-meter; |
| 4. Cable Fault Analysis; | 5. Oscilloscopes meter; | 6. Large industrial loads; |
| 7. Earth resistance meter; | 8. Leakage current meter; | 9. Power load monitoring; |
| 10. Energy meter calibrator; | 11. Power quality analyzer(PQA); | 12. Power and harmonic meters; |
| 13. Multi-function energy meter; | 14. Measuring around cable bundles; | |

Parameters

Technical parameters	
Ratio	1000:5, 1000:1, 2000:1, 4000:1 (customized)
Accuracy Class	0.1%, 0.2%, 0.5%, 1%
Primary current	0-1000A AC, 0-500A AC, 0-200A AC, 0-100A AC
Signal output	1mA/A, 5mA/A, 1mV/A, 5mV/A, 10mV/A
Secondary voltage	0-333mV, 0-500mV, 0-1V, 0-5V, 0-10V AC;
Secondary current	0-250mA, 0-500mA, 0-1A or 0-5A AC
Max. Cont. Input current	1500A
Load capacity	≤20Ω, standard 4Ω
Over voltage category	CAT III 600V
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 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	100A, 200A, 400A, 500A, 600A, 1000A optional
Output mode	Lead output(2.5m, 5m, 10m or customized)
Output signal	333mV, 500mV, 1V, 2V, 5V, 10V AC at nominal input current
Connector	BNC, 4mm banana, signal cable(2 cores), customized
Accuracy (1000A Range)	
0-10A	≤0.5%
10-100A	≤0.2%
100-1000A	≤0.1%

Phase Shift(1000A Range)

0-10A ≤0.5°

10-100A ≤0.2°

100-1000A ≤0.1°

Mechanical parameters

Dimensions (L x W x H) (mm) 163 x 310 x 34

Weight (g) 900

Holding wire diameter (mm) φ110

Max. jaw opening (mm) 110

Jaw color Black

Material PC+ABS, UL94 V0

Selection Guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
P110-500	500A	600A	5A	100:1	2.5VA	0.5%
P110-600	600A	720A	5A	120:1	2.5VA	0.5%
P110-800	800A	960A	5A	160:1	2.5VA	0.5%
P110-1000	1000A	1200A	5A	200:1	2.5VA	0.5%
P1101-200	200A	240A	1A	200:1	customized	0.2%
P1101-300	300A	360A	1A	300:1	customized	0.2%
P1101-400	400A	480A	1A	400:1	customized	0.2%
P1101-500	500A	600A	1A	500:1	customized	0.2%
P1101-600	600A	720A	1A	600:1	customized	0.2%
P1101-800	800A	960A	1A	800:1	customized	0.2%
P1101-1000	1000A	1200A	1A	1000:1	customized	0.1%
P1102-500	500A	600A	500mA	1000:1	customized	0.1%
P1102-600	600A	720A	500mA	1200:1	customized	0.1%
P1102-800	800A	960A	500mA	1500:1	customized	0.1%
P1102-1000	1000A	1200A	500mA	2000:1	customized	0.1%
P1103-800	800A	960A	400mA	2000:1	customized	0.1%
P1103-1000	1000A	1200A	400mA	2500:1	customized	0.1%
P1104-250	250A	300A	250mA	1000:1	customized	0.1%
P1104-500	500A	600A	250mA	2000:1	customized	0.1%
P1104-1000	1000A	1200A	250mA	4000:1	customized	0.1%

Model	Rate Current	Max Current	Secondary Voltage	Coil Ratio	Burden Resistance	Accuracy
P1105-200	200A	240A	1V	1000:1	customized	0.1%
P1105-300	300A	360A	1V	1000:1	customized	0.1%
P1105-400	400A	480A	1V	1000:1	customized	0.1%
P1105-500	500A	600A	1V	1000:1	customized	0.1%
P1105-600	600A	720A	1V	1000:1	customized	0.1%
P1105-800	800A	960A	1V	1000:1	customized	0.1%
P1105-1000	1000A	1200A	1V	1000:1	customized	0.1%
P1106-200	200A	240A	5V	1000:1	customized	0.1%
P1106-300	300A	360A	5V	1000:1	customized	0.1%
P1106-400	400A	480A	5V	1000:1	customized	0.1%
P1106-500	500A	600A	5V	1000:1	customized	0.1%
P1106-600	600A	720A	5V	1000:1	customized	0.1%
P1106-800	800A	960A	5V	1000:1	customized	0.1%
P1106-1000	1000A	1200A	5V	1000:1	customized	0.1%
P1108-200	200A	240A	10V	1000:1	customized	0.1%
P1108-300	300A	360A	10V	1000:1	customized	0.1%
P1108-400	400A	480A	10V	1000:1	customized	0.1%
P1108-500	500A	600A	10V	1000:1	customized	0.1%
P1108-600	600A	720A	10V	1000:1	customized	0.1%
P1108-800	800A	960A	10V	1000:1	customized	0.1%
P1108-1000	1000A	1200A	10V	1000:1	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	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%