

P8

ECONOMIC 5A CURRENT MEASUREMENT 2500:1 CLAMP CT SENSER

The P8 clamp ct sensor is an affordable & durable mini current clamp ct for measurements to 10A AC. This clamp ct sensor uses a special magnetic core to provide higher accuracy and lower phase shift 0.2°, current range 5A/10A/20A, ratio 2500:1, 2000:1 or 1000:1, frequency range from 40Hz to 2kHz. This ct sensor will read the magnitude of alternating current (AC) as well as the phase shift and waveform. The P8 Series AC current clamp ct sensor is a cheap and economic current clamp probe to be used in power and low level current measurement applications.

All of our clamp ct sensors 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

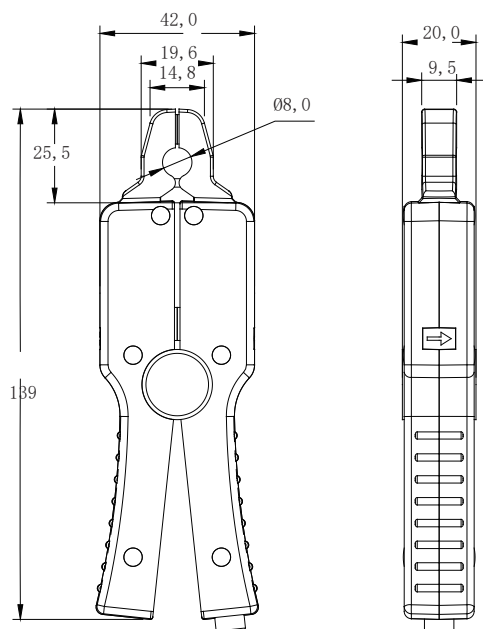
1. Economic design;
2. UL, CE CNAS mark;
3. Small, compact size;
4. 40Hz to 2kHz response;
5. 1mA/A AC output signals;
6. High content nickel metal core;
7. Measurement range of 1mA to 20A AC;
8. Low phase shift for power measurement;
9. Min 1mA for leakage current measurement;
10. Ratio 2500:1 or 2000:1, high precision 0.2%;
11. Improved ergonomic design and easy operation;
12. Designed to EN 61010, 600V CAT III safety standard;
13. Designed for DMMs, loggers, recorders and oscilloscopes;
14. Jaw opening accommodates conductors up to 8mm diameter;



Application

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|-------------------------------------|-------------------------------------|----------------------------------|
| 1. HVAC; | 2. Multimeter; | 3. Power meter; |
| 4. Oscilloscopes; | 5. Waveform analysis; | 6. Phase angle meter; |
| 7. Leakage current meter; | 8. Power load monitoring; | 9. Data logging/recording; |
| 10. Energy meter calibrator; | 11. Power quality measuring; | 12. Measuring in breaker panels; |
| 13. CT secondary current detection; | 14. Measuring around cable bundles; | |

Outline Drawing



Parameters

Technical parameters	
Ratio	2500: 1, 2000:1, 1000:1(customized)
Accuracy Class	0.2%, 0.5%
Primary current	0 - 1A AC, 0 - 5A AC, 0 - 10A AC
Signal output	1mA/A, 0.5mA/A, 0.4mA/A, 1mV/A, 5mV/A, 10mV/A
Secondary voltage	0 - 50mV, 0-100mV, 0-200mV, 0-1V, 0-2V AC (customized)
Secondary current	0 - 2.5mA, 0-5mA, 0-10mA, 0-20mA AC (customized)
Max. Cont. Input current	20A
Load capacity	≤10Ω, standard 4Ω
Over voltage category	CAT III 600V
Frequency range	40Hz-2KHz
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

Technical parameters - continued

Installation	Clamp type
Range	1A, 5A, 10A optional
Output mode	Lead output(2.5m, 5m or customized)
Output signal	333mV, 50mV, 1V, 2V AC at nominal input current
Connector	BNC, 4mm banana, signal cable(2 cores), Audio plug etc

Accuracy (20A Range)

0-10mA	$\leq 1\%$
10mA-1A	$\leq 0.5\%$
1A-20A	$\leq 0.5\%$

Phase Shift(20A Range)

0-10mA	$\leq 1^\circ$
10mA-1A	$\leq 0.5^\circ$
1A-20A	$\leq 0.2^\circ$

Mechanical parameters

Dimensions (L x W x H) (mm)	42× 139 × 20
Weight (g)	180
Holding wire diameter (mm)	φ8
Max. jaw opening (mm)	8
Jaw color	Black
Material	PC+ABS+Polycarbonate, UL94 V0

Selection Guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
P8-5	5A	6A	2mA	2500:1	customized	0.2%
P8-10	10A	12A	4mA	2500:1	customized	0.2%
P8-20	20A	24A	8mA	2500:1	customized	0.2%
P8-5-1	5A	6A	2.5mA	2000:1	customized	0.2%
P8-10-1	10A	12A	5mA	2000:1	customized	0.2%
P8-20-1	20A	24A	10mA	2000:1	customized	0.2%
P8V1-5	5A	6A	50mV	2000:1	customized	0.2%
P8V2-10	10A	12A	100mV	2000:1	customized	0.2%
P8V3-20	20A	24A	200mV	2000:1	customized	0.2%
P8V1-5-1	5A	6A	0.5V	2000:1	customized	0.2%
P8V2-10-1	10A	12A	1V	2000:1	customized	0.2%
P8V3-20-1	20A	24A	2V	2000:1	customized	0.2%

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%