

## P18

### 100A voltage Output 2M Hz bandwidth Class 0.1 AC Current Clamp

*The round jaw design on the P18 Series AC current clamp along with the high content nickel metal core makes them well suited for power quality applications where high accuracy and low phase shift along with wide frequency are important. Measurement range is 1mA to 120A.*

*The P18 is a general purpose 100A AC current clamp designed for use with DMMs, power loggers and energy meter calibration 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 P18 has an integral 2.5m lead terminated. The rounded jaw design on this current clamp makes it well-suited for power applications where high accuracy 0.1% and low phase shift and wide frequency response are important.*

## Applications

1. Power quality analyzer(PQA)
2. power and harmonic meters
3. Phase angle meter
4. Energy meter calibrator
5. Measuring around cable bundles
6. Power load monitoring
7. Data logging/recording
8. Waveform analysis(oscilloscopes meter)

## Features

1. Measurement range of 1mA to 120A AC
2. Improved ergonomic design & easy operation
3. High content nickel metal permalloy core
4. Frequency 10Hz-2MHz Bandwidth
5. Holding wire diameter:  $\phi 18\text{mm}$
6. Conforms to EN 61010, 600V CAT III
7. Low phase shift for power measurement
8. Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
9. UL, CE mark



## Parameters

Electrical parameters	
Ratio	1000: 1 or 2000:1 (customized)
Accuracy class	0.1%, 0.2%
Primary current	0 - 100A AC or 0-200A AC
Secondary current	0 - 100mA AC or 0 - 200mA AC (customized)
Secondary voltage	0 - 100mV AC, 0 - 1V AC or 0-5V AC (customized)
Max. Cont. Input current	120A or 240A
Load capacity	≤4Ω
Over voltage category	CAT III 600V
Output signal (AC current)	From 0 to 200mA AC at nominal input current
Output signal (AC voltage)	From 0 to 5V AC at nominal input current
Frequency range	10Hz-2MHz
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-40°C to +55°C
Output	2.5 meter cable with D01 or BNC connector
Max. voltage not insulated conductors	600 V
Standard	EN 61010-1, EN 61010-2-032, IEC60044-1
Installation	clamp type
Output mode	lead output(2.5m, 5m or 10m)
Mechanical parameters	
Dimensions (L x W x H) (mm)	52.5 x 137.5 x 28
Weight (g)	400
Holding wire diameter (mm)	φ18
Max. jaw opening (mm)	18
Jaw color	Red, yellow, blue, green, black
Material	PC+ABS, UL94 V0

## Selection guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
P18-10-1	10A	12A	10mA	1000:1	customized	0.10%
P18-10-2	10A	12A	5mA	2000:1	customized	0.10%
P18-20-1	20A	24A	20mA	1000:1	customized	0.10%
P18-20-2	20A	24A	10mA	2000:1	customized	0.10%
P18-100-1	100A	120A	100mA	1000:1	customized	0.10%
P18-100-2	100A	120A	50mA	2000:1	customized	0.10%
P18-200-1	200A	240A	200mA	1000:1	customized	0.10%

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
P18-200-2	200A	240A	100mA	2000:1	customized	0.10%
P18-10-12	10A	12A	10mA	1000:1	customized	0.20%
P18-10-22	10A	12A	5mA	2000:1	customized	0.20%
P18-20-12	20A	24A	20mA	1000:1	customized	0.20%
P18-20-22	20A	24A	10mA	2000:1	customized	0.20%
P18-100-12	100A	120A	100mA	1000:1	customized	0.20%
P18-100-22	100A	120A	50mA	2000:1	customized	0.20%
P18-200-12	200A	240A	200mA	1000:1	customized	0.20%
P18-200-22	200A	240A	100mA	2000:1	customized	0.20%
P18-10-10	10A	12A	100mV	1000:1	customized	0.10%
P18-10-20	10A	12A	100mV	2000:1	customized	0.10%
P18-20-10	20A	24A	100mV	1000:1	customized	0.10%
P18-20-20	20A	24A	100mV	2000:1	customized	0.10%
P18-100-10	100A	120A	100mV	1000:1	customized	0.10%
P18-100-20	100A	120A	100mV	2000:1	customized	0.10%
P18-200-10	200A	240A	100mV	1000:1	customized	0.10%
P18-200-20	200A	240A	100mV	2000:1	customized	0.10%
P18-10-11	10A	12A	1V	1000:1	customized	0.10%
P18-10-21	10A	12A	1V	2000:1	customized	0.10%
P18-20-11	20A	24A	1V	1000:1	customized	0.10%
P18-20-21	20A	24A	1V	2000:1	customized	0.10%
P18-100-11	100A	120A	1V	1000:1	customized	0.10%
P18-100-21	100A	120A	1V	2000:1	customized	0.10%
P18-200-11	200A	240A	1V	1000:1	customized	0.10%
P18-200-21	200A	240A	1V	2000:1	customized	0.10%
P18-10-12	10A	12A	5V	1000:1	customized	0.10%
P18-10-22	10A	12A	5V	2000:1	customized	0.10%
P18-20-12	20A	24A	5V	1000:1	customized	0.10%
P18-20-22	20A	24A	5V	2000:1	customized	0.10%
P18-100-12	100A	120A	5V	1000:1	customized	0.10%
P18-100-22	100A	120A	5V	2000:1	customized	0.10%
P18-200-12	200A	240A	5V	1000:1	customized	0.10%
P18-200-22	200A	240A	5V	2000:1	customized	0.10%