

S120

2000A Clamp On Current Transformer

The S120 is a high performance AC Clamp on current transformer probe with excellent transformation and low phase shift. The high quality magnetic permalloy core and uniform windings provide for accurate measurements up to 2000AAC/1000AAC/500AAC. 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 100mA to 2000A.

The S120 is a general purpose 2000A AC Clamp current probe transformer designed for use with DMMs, cable fault analysis and loggers instruments that have a current input. It has a 1000:1 or 2000:1 ratio and output of 1mA per amp or 1mV per amp measured in the jaw. The S120 has an integral 2.5m or 5m lead terminated. The rounded jaw design on this clamp probe makes it well-suited for cable fault analysis applications where high accuracy and low phase shift and wide frequency.

Applications

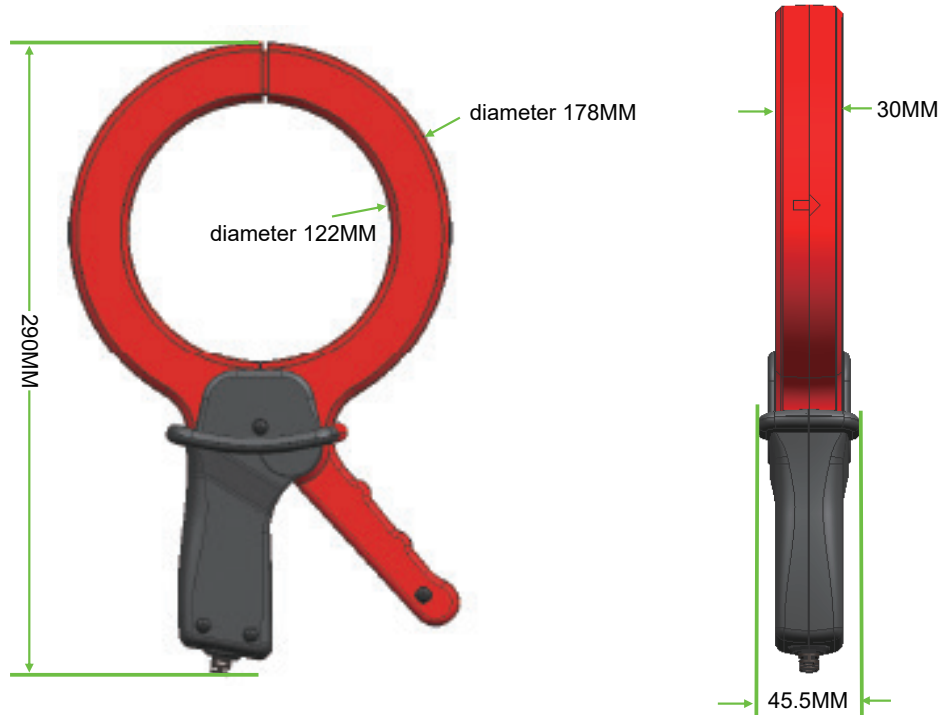
1. Power quality analyzer(PQA)
2. power and harmonic meters
3. Energy meter calibrator
4. Cable Fault Analysis
5. Measuring around cable bundles
6. Power load monitoring
7. Earth resistance meter
8. Large industrial loads

Features

1. Measurement range of 10mA to 2000A AC
2. Improved ergonomic design & easy operation
3. High content nickel metal permalloy core
4. Frequency 10-2MHz
5. Holding wire diameter: $\phi 120\text{mm}$
6. Conforms to EN 61010, 600V CAT III
7. Transformation ratio: 1000:1, 2000:5
8. Low phase shift for power measurement
9. Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters



Dimension



Parameters

Electrical parameters

Ratio	1000: 1 or 2000:5 (customized)
Accuracy class	0.1%, 0.2%, 0.5%
Primary current	0 - 2000A AC
Secondary current	0-2A or 0 - 5A AC (customized)
Secondary voltage	0-2V AC (customized)
Max. Cont. Input current	2400A
Over voltage category	CAT III 600V
Output signal (AC current)	500mA, 1A,2A,5A AC at nominal input current
Output signal (AC voltage)	1V, 2V, 10V AC at nominal input current
Frequency range	10Hz-2MHz
Dielectric strength	3KV 50Hz/60Hz at 1 minute
Temperature range	-40°C to +55°C
Output	2.5 meter cable with D01 connector or BNC
Max. voltage not insulated conductors	600 V
Standard	EN 61010-1, EN 61010-2-032, IEC60044-1, IEC61869-2
Installation	clamp type
Output mode	lead output(2.5m, 5m or 10m)

Electrical parameters - continued

Accuracy (2000A Range)

0-10A	≤0.5%
10-100	≤0.2%
100-2000A	≤0.1%

Phase Shift(2000A Range)

0-10A	≤0.5°
10-100	≤0.2°
100-2000A	≤0.1°

Mechanical parameters

Dimensions (L x W x H) (mm)	178 x 290 x 30
Weight (g)	1200
Holding wire diameter (mm)	φ120
Max. jaw opening (mm)	120
Jaw color	Red & Grey
Material	PC+ABS, UL94 V0

Parameters

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
S120-200	200A	240A	5A	40:1	2.5VA	0.5%
S120-300	300A	360A	5A	60:1	2.5VA	0.5%
S120-400	400A	480A	5A	80:1	2.5VA	0.5%
S120-500	500A	600A	5A	100:1	2.5VA	0.5%
S120-600	600A	720A	5A	120:1	2.5VA	0.5%
S120-800	800A	960A	5A	160:1	2.5VA	0.5%
S120-1000	1000A	1200A	5A	200:1	2.5VA	0.5%
S120-1500	1500A	1800A	5A	300:1	2.5VA	0.5%
S120-2000	2000A	2400A	5A	400:1	2.5VA	0.5%
S120A1-200	200A	240A	1A	200:1	customized	0.2%
S120A1-300	300A	360A	1A	300:1	customized	0.2%
S120A1-400	400A	480A	1A	400:1	customized	0.2%
S120A1-500	500A	600A	1A	500:1	customized	0.2%
S120A1-600	600A	720A	1A	600:1	customized	0.2%
S120A1-800	800A	960A	1A	800:1	customized	0.2%
S120A1-1000	1000A	1200A	1A	1000:1	customized	0.1%
S120A1-1500	1500A	1800A	1A	1500:1	customized	0.1%
S120A1-2000	2000A	2400A	1A	2000:1	customized	0.1%

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
S120A2-500	500A	600A	500mA	1000:1	customized	0.1%
S120A2-600	600A	720A	500mA	1200:1	customized	0.1%
S120A2-800	800A	960A	500mA	1500:1	customized	0.1%
S120A2-1000	1000A	1200A	500mA	2000:1	customized	0.1%
S120A3-800	800A	960A	400mA	2000:1	customized	0.1%
S120A3-1000	1000A	1200A	400mA	2500:1	customized	0.1%
S120A4-250	250A	300A	250mA	1000:1	customized	0.1%
S120A4-500	500A	600A	250mA	2000:1	customized	0.1%
S120A4-1000	1000A	1200A	250mA	4000:1	customized	0.1%
S120V5-200	200A	240A	1V	1000:1	customized	0.1%
S120V5-300	300A	360A	1V	1000:1	customized	0.1%
S120V5-400	400A	480A	1V	1000:1	customized	0.1%
S120V5-500	500A	600A	1V	1000:1	customized	0.1%
S120V5-600	600A	720A	1V	1000:1	customized	0.1%
S120V5-800	800A	960A	1V	1000:1	customized	0.1%
S120V5-1000	1000A	1200A	1V	1000:1	customized	0.1%
S120V5-2000	2000A	2400A	2V	1000:1	customized	0.1%
S120V6-200	200A	240A	5V	1000:1	customized	0.1%
S120V6-300	300A	360A	5V	1000:1	customized	0.1%
S120V6-400	400A	480A	5V	1000:1	customized	0.1%
S120V6-500	500A	600A	5V	1000:1	customized	0.1%
S120V6-600	600A	720A	5V	1000:1	customized	0.1%
S120V6-800	800A	960A	5V	1000:1	customized	0.1%
S120V6-1000	1000A	1200A	5V	1000:1	customized	0.1%
S120V6-2000	2000A	2400A	5V	1000:1	customized	0.1%
S120V8-200	200A	240A	10V	1000:1	customized	0.1%
S120V8-300	300A	360A	10V	1000:1	customized	0.1%
S120V8-400	400A	480A	10V	1000:1	customized	0.1%
S120V8-500	500A	600A	10V	1000:1	customized	0.1%
S120V8-600	600A	720A	10V	1000:1	customized	0.1%
S120V8-800	800A	960A	10V	1000:1	customized	0.1%
S120V8-1000	1000A	1200A	10V	1000:1	customized	0.1%