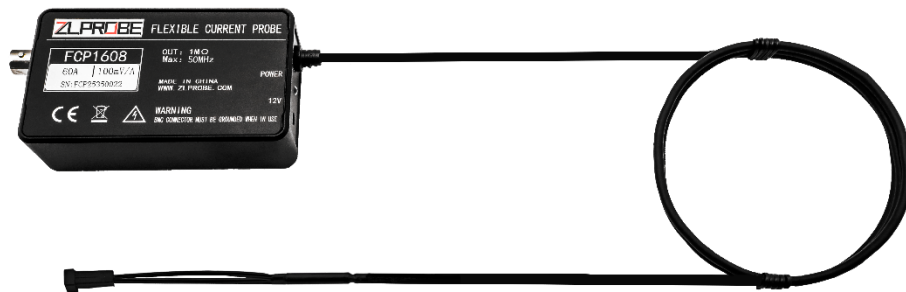


"Forked" Rogowski Coil Current Probes



Product Overview

ZLPROBE **FCP16X** series Rogowski AC current probes deliver 2% high accuracy, covering frequencies from few Hz to 80MHz and AC currents range from mA to kA, suitable for various testing scenarios from small currents to large currents.

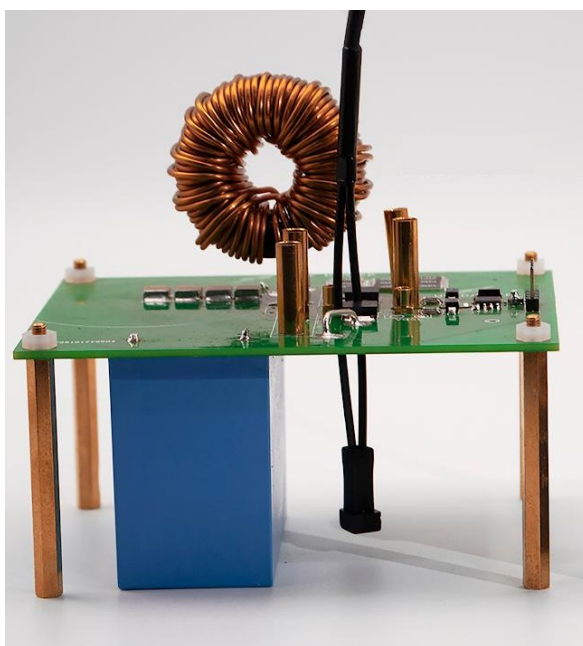
The **FCP16X** series feature a brand-new **fork-shaped** flexible Rogowski coil design, allowing for quick plugging and unplugging. It is capable of accessing narrow pins that are difficult to reach with rigid probes and looped probes. The insertion inductance is as low as several pH, which has an almost negligible impact on the measured object. The standard BNC output facilitates easy connection to oscilloscopes, data acquisition systems, and digital multimeters, enabling intuitive observation of current waveforms. It supports dual-channel BNC outputs, with consistent output waveforms, making it suitable for applications requiring dual-channel output.

FCP16X series: Coil thickness **1.6mm**, coil voltage **1kVpk**, bandwidth **50MHz**

HFCP16X series: Coil thickness **1.6mm**, coil voltage **1kVpk**, bandwidth **80MHz**

Applications

- Measurement of power frequency (50/60 Hz) and higher-order harmonic currents.
- Detection of high-frequency sinusoidal, pulsed, and transient currents.
- Measurement of sinusoidal phase shift, ripple, and pulsating currents.
- Semiconductor switching devices (IGBT, MOSFET, SiC, GaN) test and power loss analysis.
- Current and power quality analysis in motor drives, UPS, and Switch-Mode Power Supplies.
- Distributed current monitoring, measurement of power busbars and 3-phase supply systems.
- Capacitor discharge test and current measurement in small inductive/capacitive/snubber circuits.
- Measuring small AC currents in the presence of large DC currents.



Removeable cap to open & close the coil

Specifications

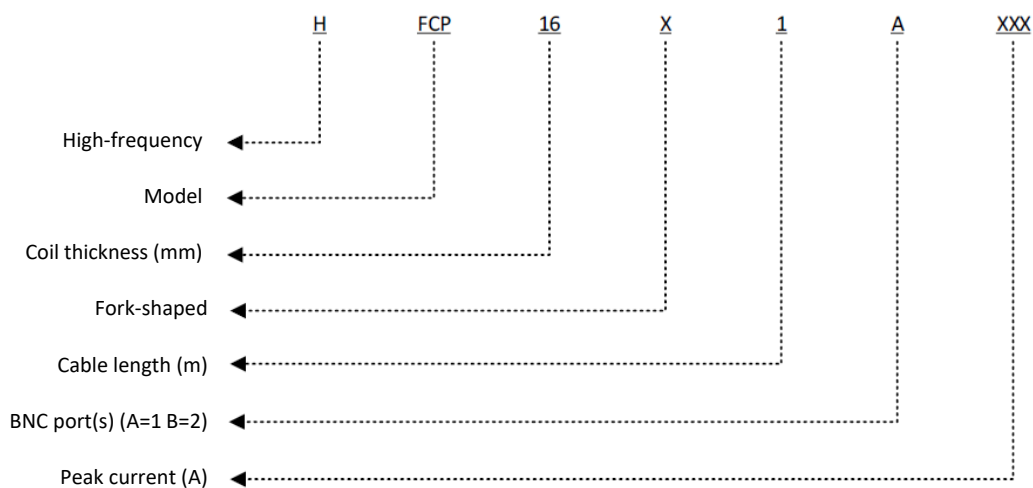
● HFCP16X Series (1.6mm thickness, 80MHz bandwidth)

Ordering Model	Sensitivity (mV/A)	Peak Current (A)	Noise (mVp-p)	Droop (%/ms)	LF Bandwidth -3dB(Hz)	Peak di/dt (kA/μs)	HF Bandwidth -3dB(MHz)	Delay (ns)
HFCP16X1A60	100	60	20	65	75	4	80	18
HFCP16X1A120	50	120	15	35	34	8	80	
HFCP16X1A300	20	300	15	9	15	20	80	
HFCP16X1A600	10	600	10	6	10	40	80	
HFCP16X1A1200	5.0	1200	10	3	6	70	80	
HFCP16X1A3K	2.0	3000	5	2	4	70	80	
HFCP16X1A6K	1.0	6000	5	2	4	70	80	
HFCP16X1A12K	0.5	12000	5	1.8	2	70	80	

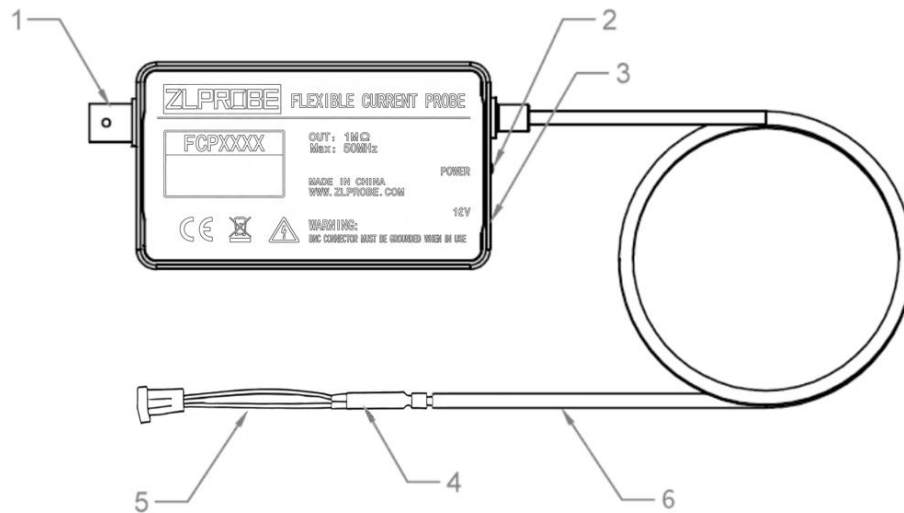
● FCP16X Series (1.6mm thickness, 50MHz bandwidth)

Ordering Model	Sensitivity (mV/A)	Peak Current (A)	Noise (mVp-p)	Droop (%/ms)	LF Bandwidth -3dB(Hz)	Peak di/dt (kA/μs)	HF Bandwidth -3dB(MHz)	Delay (ns)
FCP16X1A60	100	60	20	65	75	4	50	18
FCP16X1A120	50	120	15	35	34	8	50	
FCP16X1A300	20	300	15	9	15	20	50	
FCP16X1A600	10	600	10	6	10	40	50	
FCP16X1A1200	5.0	1200	10	3	6	70	50	
FCP16X1A3K	2.0	3000	5	2	4	70	50	
FCP16X1A6K	1.0	6000	5	2	4	70	50	
FCP16X1A12K	0.5	12000	5	1.8	2	70	50	

● Model Description: e.g. HFCP16X



Appearance



- 1) Output: Standard BNC connector. Use the included BNC cable to connect to any oscilloscope.
- 2) Power Indicator: Light will turn green when the power is on.
- 3) Power Supply: DC 12V
- 4) Current Direction: Current flows in the indicated direction is an positive output; and negative otherwise.
- 5) Fork-shaped coil sensor
- 6) Cable Length: 1m, length of cable from coil to electronic integrator (customization available).

Electrical Parameters

Temperature (Coil & Cable)	-40°C ~ +150°C
Temperature (Integrator)	0°C ~ 40°C
Operating Humidity	≤85%RH
DC Offset	max. ±2mV@25°C
Power Supply	DC 12V/1A
Max Output Voltage	±6Vpk
Terminal load requirement	≥100kΩ

Accessories

Probe Unit Model	1
DC 12V 1A adapter	1
BNC Output Cable	1
User Manual	1
Warranty Card	1
Calibration Certificate	1

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