

# Micsig

## High Frequency AC/DC Current Probe CP1003/CP1003B/CP503/CP503B

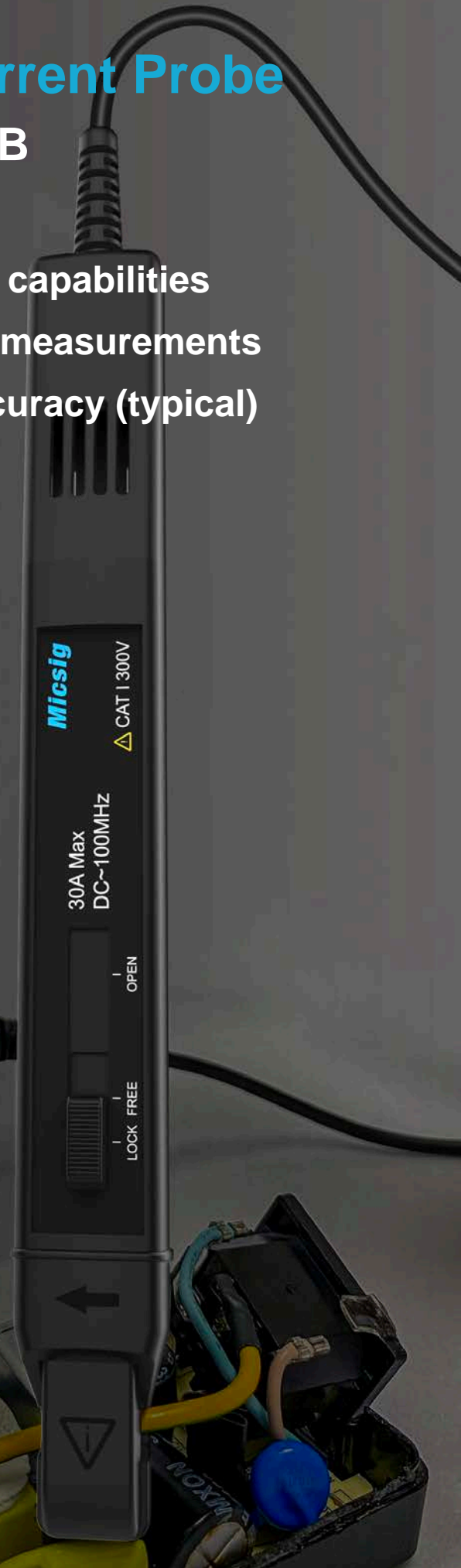
- Accurate and Easy AC/DC measuring capabilities
- 6A / 30A range selection, low current measurements
- Wide bandwidth with superior 1% accuracy (typical)

CP1003/CP1003B Bandwidth

100MHz

CP503/CP503B Bandwidth

50MHz



## Product Model:



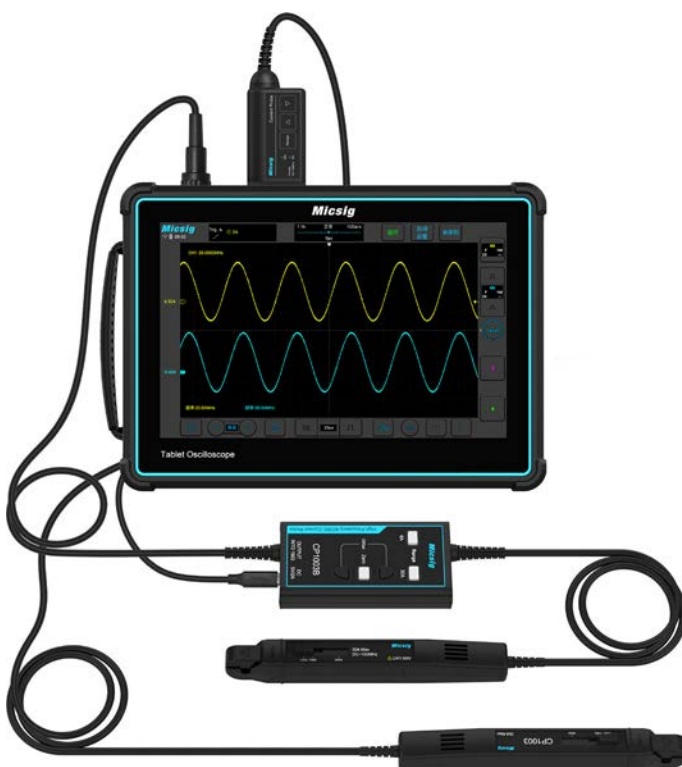
CP1003B/CP503B



CP1003/CP503

## Key Features:

- Dual range selection, easy to measure low current
- Degaussing and automatic Zero setting
- 1% DC accuracy, meet more measuring requirements
- Directly powered by Micsig UPI interface (CP1003/CP503)
- Standard BNC interface, suitable for all oscilloscopes (CP1003B/CP503B)



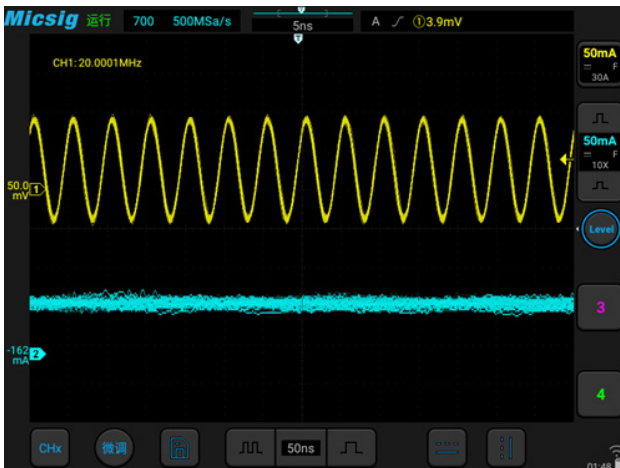
## Applications:

- Electric vehicle transportation design
- Switching power supply design
- Experiment of electronic engineering
- Semiconductor devices design
- Avionics design
- Inverter/Transformer design
- Electronic ballast design
- Industrial Control / Consumer Electronics design
- Engine driven design
- Power electronics and electric drive experimental design

# Application Performance

HF Current Signal

30A 0.1V/A



High frequency AC/DC current probe can easily measure signals over 20MHz (Yellow waveform on CH1)  
Signal is completely distorted when measured by Low frequency current probe (Blue waveform on CH2)

Surge Current

6A 0.5V/A



Surge current waveform at power adapter startup

# Easy Measurement

## Exquisite Appearances



Delicate probe head, can be held in one hand, easy to operate, suitable for various complex measurement scenarios

## Overload Indication



When current is overloaded,  
**CP503/CP1003:** 2 Range LED indicators flash alternately  
**CP503B/CP1003B:** Corresponding Range button indicator flashes

## Degaussing/Auto Zero Setting

After power on, the probe will automatically zero and degauss



**CP503/CP1003:** Press the buttons "△" "▽" at the same time until the range LED green light turns off and then release, the probe will carry out Degaussing and Zero setting  
**CP503B/CP1003B:** Press the Zero button "□", light on, the probe will carry out Degaussing and Zero setting

## Measurement on the go



Standard dedicated suitcase, trouble-free when using outdoors

# Specifications

Model	CP503	CP1003	CP503B	CP1003B
Power Interface	Micsig UPI		Standard BNC interface	
Bandwidth	50MHz	100MHz	50MHz	100MHz
Rise Time	≤ 7ns	≤ 3.5ns	≤ 7ns	≤ 3.5ns
Range	6A (2X) / 30A (10X)			
Output sensitivity	1V/2A (6A) 1V/10A (30A)			
DC accuracy (typical)	±1%±10mA (6A) ±1%±50mA (30A)			
Delay	< 6ns (6A) < 6ns (30A)		< 30ns (6A) < 30ns (30A)	
Current Range	20mA~6Apk (6A) 50mA~30Apk (30A)			
Max. Current Input	30Apk, 60Apk-pk, 21.21Arms			
Noise	≤ 1.4 mA RMS (Bandwidth at 20 MHz, Range 30A, 10X)			
Max. Working Voltage	CAT II 300V			
Max. Floating Voltage	CAT II 300V			
Max. Conductor Diameter	5mm			
Overload Indicator	Flashing light			
Power Supply	DC 12V		DC 5V 3A	

