

High Frequency AC/DC Current Probe CP503B/CP1003B





TPS Company Video on Youtube https://youtu.be/DTcA-IU2NWA





High Frequency AC/DC Current Probe

CP503B/CP1003B



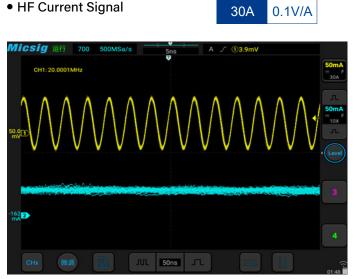
Key Features

- Dual range selection, easy to measure low current
- Degaussing and automatic Zero setting
- 1% DC accuracy, meet more measuring requirements
- 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



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 waveform at power adapter startup

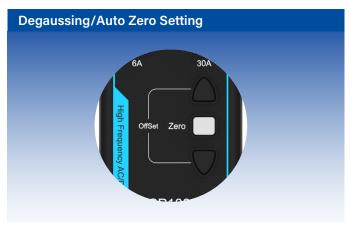




Easy Measurement



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



CP503B/CP1003B: Press the Zero button "□", light on, the probe will carry out Degaussing and Zero setting



CP503B/CP1003B: Corresponding Range button indicator flashes



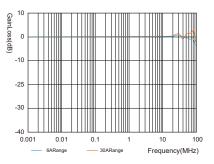
Standard dedicated suitcase, trouble-free when using outdoors

Specifications		
Model	CP503B	CP1003B
Bandwidth	50MHz	100MHz
Rise Time	≤7ns	≤3.5ns
Range	6A (2X) / 30A(10X)	
Output Sensitivity	1V / 2A (6A) 1V / 10A (30A)	
DC Accuracy (Typical)	\pm 1% \pm 10mA (6A) \pm 1% \pm 50mA(30A)	
Delay	< 30ns (6A) < 30ns (30A)	
Current Range	20mA~6Apk (6A) 50mA~30Apk (30A)	
Max. Current Input	30Apk, 60Apk-pk,21.21Arms	
Noise	${\leq}$ 1.4 mA RMS (Bandwidth at 20 MHz, Range 30A, 10X)	
Max. Working Voltage	CAT I 300V	
Max. Floating Voltage	CAT I 300V	
Max. Conductor Diameter	5mm	
Overoad Indicator	Flashing Light	
Power Supply	DC 5V 3A	

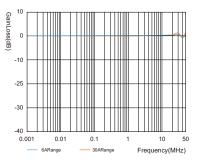




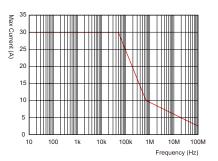
Amplitude-frequency characteristic curve CP1003/CP1003B



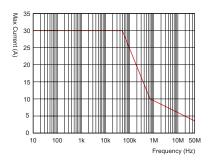
Amplitude-frequency characteristic curve CP503/CP503B



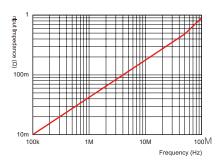
Max. Current vs Frequency Curve CP1003/CP1003B



Max. Current vs Frequency Curve CP503/CP503B



Input Impedance vs Frequency Curve CP1003/CP1003B



Input Impedance vs Frequency Curve CP503/CP503B

