

# PRODUCT CATALOG

# Tablet Oscilloscope Creator Optical-isolated Probe Leader

- High Resolution Oscilloscope
- Digital Storage Oscilloscope
- Tablet Oscilloscope
- Automotive Oscilloscope
- Android Oscilloscope

- SigOFIT Optical-fiber Isolated Probe
- High Voltage Differential Probe
- Rogowski AC Current Probe
- High Frequency AC/DC Current Probe
- Low Frequency AC/DC Current Probe
- AC Current Probe

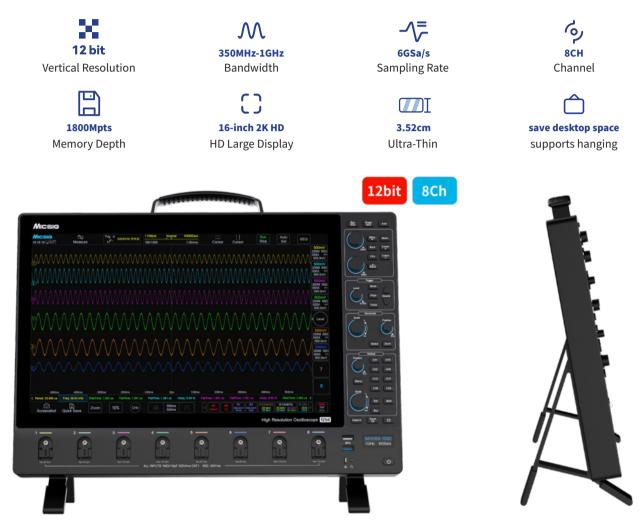
Micsig / Product Inde	х						N	licsig
	8CH High	Resolut	ion Oscill	oscope N	/IHO 6 Seri	ies 16 inc	hes NEW	P03-P04
	350MHz-1GHz Bandwidth	<b>GGSa/s</b> 6ampling Rate	<mark>всн</mark> Analog Channels	1800Mpts Memory Depth	230,000wfms/s Max. waveform capture rate	3.52cm ultra-thin design	save desktop space supports hanging	ADC 12bit vertical resolution
	High Res	solution	Oscillos	cope MF	10 3 Serie	2S 14 inche	нот	P05-P07
	250MHz-500MHz Bandwidth	- <b>√</b> = 3GSa/s Sampling Rate	<mark>4СН</mark> Analog Channels	360Mpts Memory Depth	230,000wfms/s Max. waveform capture rate	3.58cm ultra-thin design	save desktop space supports hanging	ADC 12bit vertical resolution
	Digital S	torage (	Oscillosco	ope MD(	O Series	14 inches		P08
	250MHz-500MHz Bandwidth	<b>3GSa/s</b> Sampling Rate	ф 4CH Analog Channels	360Mpts Memory Depth	230,000wfms/s Max. waveform capture rate	3.58cm ultra-thin design	save desktop space supports hanging	
	Tablet O	scillosco	ope ETO	Series (	14 inches			P09-P10
	<b>350MHz-500MHz</b> Bandwidth	<b>-√</b> 3GSa/s Sampling Rate	<mark>фу</mark> 4СН Analog Channels	360Mpts Memory Depth	230,000wfms/s Max. waveform capture rate	<b>13500mAh</b> built-in lithium battery	save desktop space	SCPI/APP/ remote control supports remote control operation
	Tablet O	scillosco	ope TO Se	eries 🔟	).1 inches			P11
	<b>100MHz-300MHz</b> Bandwidth	<b>1GSa/s-2GSa/s</b> Sampling Rate	<mark>2/4СН</mark> Analog Channels		78,000-300,000wfms/s Max. waveform capture rate	<b>5</b> 7500mAh built-in lithium battery	SCPI/APP/ remote control supports remote control operation	
	Tablet O	scillosco	ope STO S	Series	8 inches			P12
	<b>100MHz-200MHz</b> Bandwidth	<b>-√</b> <b>1GSa/s</b> Sampling Rate	<mark>2/4СН</mark> Analog Channels	70Mpts Memory Depth	A30,000wfms/s Max. waveform capture rate	5+ hours battery life built-in lithium battery	SCPI/APP supports remote control operation	
Automative Oscilloscope	Automo	tive Osc	illoscope	ATO Se	ries 10.1 in	ches		P13-P14
	<b>100MHz-300MHz</b> Bandwidth	1GSa/S-2GSa/s Sampling Rate	<mark>2/4СН</mark> Analog Channels		<b>78,000-300,000wfms/s</b> Max. waveform capture rate	<b>5 7500mAh</b> built-in lithium battery	integrated car diagnostic pro feature dedicated to car maintenance	25
Ministry Automative Continenting	Automo	tive Osc	illoscope	SATO S	eries 🔋 🛯	ches		P13-P14
	<b>100MHz-200MHz</b> Bandwidth	1GSa/S Sampling Rate	2/4CH Analog Channels	70Mpts Memory Depth	(130,000wfms/s) Max. waveform capture rate	5+ hours battery life built-in lithium battery	integrated car diagnostic pro feature dedicated to car maintenance	25
		(USB) O		pe VTO	/ VATO S	eries		P15
2333	200MHz Bandwidth	-∕⊊ 1GSa/S Sampling Rate	4CH Analog Channels	50Mpts Memory Depth	tiny slim body design Max. waveform capture rate	<b>7500mAh</b> built-in lithium battery	direct-connect with Android economical and portable	

	SigOFI	۲ Optica	l-fiber	Isolate	d Probe	Best			P16-P18
	100MHz-1GHz Bandwidth	±6250V Differential Voltage Range	1% DC Gain accuracy	CMRR Up to180dB CMRR	85kVpk Common mode voltage range	OdB/20dB Dual range switching	(7) rapid mul self-calibration instant access	tiple attenua available full-scale output	Ø
	High Vo	oltage Di	ifferen	tial Pro	be DP Se	eries	нот		P19-P20
	100MHz-500MHz Bandwidth	$\bigtriangledown$	2% Accuracy	CMRR DC: >-80dB CMRR	ē	(7) rapid self-calibration	Audio-Visual Alert Overvoltage Alarm	BNC interface universal interface	
·	Rogows	ski AC C	urrent	Probe F	RCP Seri	es			P21-P22
	Up to 30MHz Bandwidth	6000Apk Maximum Measurable Current	2% Typical Accuracy	<b>1.6mm</b> diameter	<b>۱   ۱ </b> < 5mVpp	OI		BNC interface universal interface	
	High Fr	equency	y AC / D	OC Curre	ent Prob	e CP S	eries		P23
	50MHz/100MHz Bandwidth	<b>5A/30A</b> Dual Range Design	1% Accuracy	5mm jaw diameter	IIIII <4mApp(5A) Output Noise	Up to 1mA Resolution	One-Click Completion Quick Demagnetization and Zeroing	BNC interface universal interface	
	Low Fre	equency	AC / D	C Curre	ent Prob	e CP21	00 Series	5	P24
	300kHz/800kHz/ 2.5MHz Bandwidth		(7) anual/Automatic Zeroing Method		tiny Convenient for Testing Compact er and Exquisite	BNC interface universal interface			
	AC Curr	rent Pro	be ACP	21000					P25
	10Hz-100kHz Bandwidth	C 10A/100A/1000A Three-Range Design	1% Highest Precision	52mm Jaw Diameter	A 2000A(2 seconds) Maximum Primary Current	BNC interface universal interface			

**MICSIG** 

# 8CH High Resolution Oscilloscope MHO 6 Series

The MHO high-resolution oscilloscope 6 series, with up to 1GHz bandwidth, 6GSa/s real-time sampling rate, 8 analog channels, 1800Mpts of memory depth, and 12-bit vertical resolution. Its high bandwidth and 8-channel capability are suitable for high-speed circuit analysis and synchronized testing of multiple signals. With a 3.52cm ultra-thin design, it saves valuable desktop space. The 16-inch touch screen with a 1920\*1200 resolution offers a crisp waveform display for a comfortable visual experience.



## **Key Performance Indicators**

- 12-bit vertical resolution
- 8 analog channels
- 3.52cm Ultra-Thin Design
- Simultaneous data saving on multi-channel
- ► High / Low pass bandwidth filtering
- Segmented storage function
- Advanced math and FFT function
- Standard decodes: RS-232/422/485/UART, CAN, CAN FD,LIN, SPI, I<sup>2</sup>C, ARINC-429, MIL-STD-1553B

- ▶ 350MHz, 500MHz or 1GHz options available
- ▶ 6GSa/s sampling rate, 1800Mpts memory depth
- ▶ 16-inch 2K High-Definition Touch Screen Display
- ▶ Ultra-friendly UI, learn to use in 5 minutes
- ► Mic-OPI <sup>™</sup> patented probe interface, automatic probe calibration
- Mobile APP, PC remote control, SCPI commands
- ▶ 256G internal storage to save large data



8-bit

## **Features**

🤣 8 analog channels

- Can observe 8 signals simultaneously
- Effortlessly handles complex system timing analysis

#### M 1GHz bandwidth

- Quickly captures high-speed signals
- Easily meets the testing challenges of the most advanced devices

**3.52cm** ultra-thin body

- Supports hanging, portable and aesthetically pleasing
- Significantly saves desktop space

## **Key Specifications**

- 🚾 12-bit high resolution
- 4096-level quantization
- More clearly observe waveform details

#### 16-inch high-definition touch screen

- Resolution up to 1920\*1200
- Provides a delicate and clear visual experience

#### **3** interaction modes



Quantization level up to 4096

12-bit

- Supports touch operation, button knob operation, and hybrid operation
- Quick operations simplify complex tasks

Model	MHO68-1000	MHO68-500	MHO68-350			
Bandwidth	1GHz	500MHz	350MHz			
Rise time	≤ 0.35ns	≤ 0.7ns	≤ 1ns			
Analog channels	8CH					
Sampling rate	6GSa/s					
Memory depth	1800Mpts					
Vertical resolution	12bit					
Trigger types	Edge, Pulse Width, Logic, N Edge, Runt Pulse (Runt), Slope, Time Out, Video, Seria					
Bus decoding	RS-232/422/485/UART, CAN, CAN FD, LIN, SPI, I <sup>2</sup> C, ARINC429, 1553B					
Interfaces	USB 3.0 Host, USB type-C, LAN, HDMI, Trigger out					
Display	16" TFT LCD touch screen, 1920*1200 resolution					
Dimension / Net weight		440*307*35.2mm / 5.7kg				



# **High Resolution Oscilloscope MHO 3 Series**

The MHO 3 series of high-resolution oscilloscopes has revolutionized the design of traditional benchtop oscilloscopes, with a body thickness of only 3.58 cm, support for suspension, a 14-inch anti-glare touch screen, and a resolution of 1920\*1200. It features a hybrid operation mode of full touch control and knob buttons, equipped with the exclusive SigtestUI professional system for test instruments, bringing you an unparalleled oscilloscope experience. The MHO 3 series boasts a 12-bit vertical resolution, a maximum bandwidth of 500MHz, a real-time sampling rate of 3GSa/s, 4 analog channels, a storage depth of 360Mpts, and a waveform capture rate of 230,000 waveforms per second. It has a rich interface including HDMI, USB, supports Wi-Fi, mobile APP, PC software, and SCPI control, comes standard with decoding for 8 serial bus protocols, FFT data analysis, and a full set of measurement and statistical functions. Its powerful performance easily handles various circuit development and debugging analysis tasks.



## **Key Performance Indicators**

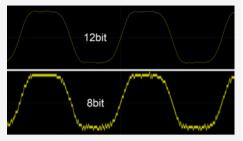
- 12-bit vertical resolution
- ▶ 3GSa/s sampling rate, 360Mpts memory depth
- 3.58cm Ultra-Thin Design
- Simultaneous data saving on multi-channel
- High / Low pass bandwidth filtering
- ▶ 230,000 wfms/s waveform capture rate
- Segmented storage function
- Advanced math and FFT function

- ▶ 250MHz, 350MHz or 500MHz options available
- ▶ 4 analog channels, base noise < 80µVrms
- ▶ 14-inch 2K High-Definition Touch Screen Display
- Ultra-friendly UI, learn to use in 5 minutes
- ► Mic-OPI <sup>™</sup> patented probe interface, automatic probe calibration
- ▶ Mobile APP, PC remote control, SCPI commands
- 32G internal storage to save large data
- Standard decodes: RS-232/422/485/UART, CAN, CAN FD,LIN, SPI, I<sup>2</sup>C, ARINC-429, MIL-STD-1553B



## **Features**

#### 12-bit vertical resolution



► 12-bit hi-re ADC with a quantization level of up to 4096, 16 times that of traditional 8-bit, presents unmatched waveform details.

#### **Remote control**



 Support PC and smartphone remote control, also have HDMI port for demonstration purpose. Support SCPI programming commands control, helping engineers achieve automated measurements more flexibly and efficiently.

#### Wall / Arm mounting



 130 mm x 300 mm wall mount interface, convenient wall / arm mounting, flexible and space-saving on the desktop.

#### **Various connections**



USB 3.0 Host, USB Type-C, LAN, Grounding, HDMI, Trigger out, etc.

## Mic-OPI ™ probe interface



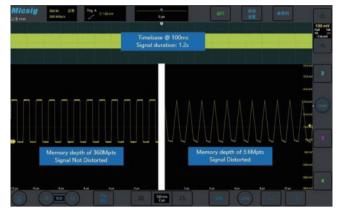
Mic-OPI™ interface performs automatic probe compensation and calibration, standard BNC adapters help to connect with all BNC probes.

## **Key Specifications**

Model	MHO3-5004	MHO3-3504	MHO3-2504			
Bandwidth	500MHz	350MHz	250MHz			
Rise time	≤ 0.7ns	≤ 1ns	≤ 1.4ns			
Analog channels		4CH				
Sampling rate	3GSa/s					
Memory depth	360Mpts					
Waveform capture rate	230,000 wfms/s					
Noise	< 80µVrms					
Vertical resolution	12bit					
Trigger types	Edge, Pulse Width, Logic, N Edge, Runt Pulse (Runt), Slope, Time Out, Video, Seria					
Bus decoding	RS-232/422/485/UART, CAN, CAN FD, LIN, SPI, I <sup>2</sup> C, ARINC429, 1553B					
Interfaces	USB 3.0 Host, USB type-C, LAN, HDMI, Trigger out					
Display	14" TFT LCD touch screen, 1920*1200 resolution					
Dimension / Net weight		400*280*35.8mm / 4.3kg				



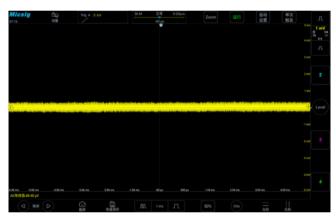
## **Functions**



#### **Deep memory**

Insufficient memory depth often leads to distortion when long time- base signals were expanded. With memory depth of up to 360Mpts, there is no reduction in performance even with two channels opened at the same time.

The signals will still maintain excellent fidelity even at long period of time.



#### Low noise floor

Even at its full bandwidth of 500M, the noise floor of the MHO 3 series still less than  $80\mu$ Vrms, allow engineers accurately capture weak but important signals during daily circuit debugging and signal analysis.



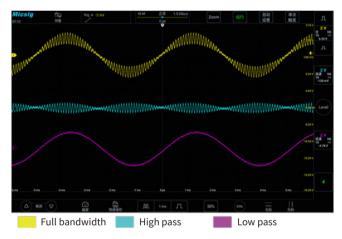
#### **Statistics Measurement**

Simultaneously calculate the average, maximum, minimum, and root mean square of 10 measurement items, with a max count of up to 10,000, every waveform data is accurately recorded, provide more accurate and comprehensive readings.



#### Segmented storage acquisition

The segmented storage function divides the limited storage space into multiple small segments and collects multiple trigger events into one storage space and allow to play back captured signals, effectively captures target signals multiple times over a long period of time.



#### Hardware digital filtering

Digital filtering can selectively allow or block signal components within specific frequency ranges.



#### Serial bus decoding and analysis

Support 8 serial bus decodes: RS-232/422/485/ UART, CAN, LIN, CAN FD, SPI, I2C, ARINC-429, 1553B. With the TXT decoding text mode, the data can be transferred to CSV format.



# **Digital Storage Oscilloscope MDO Series**

- Simultaneous data saving on multi-channel
- High / Low pass bandwidth filtering
- Standard segmented storage function
- Advanced math and FFT function
- ▶ Ultra-friendly UI, get to use in 5 minutes

- ▶ Mic-OPI <sup>™</sup> probe interface, automatic probe calibration
- ▶ Mobile APP, PC remote control, SCPI commands
- ▶ 32G internal storage to save big data
- ► Standard decodes: RS-232/422/485/UART, CAN, CAN FD,LIN,SPI, I<sup>2</sup>C, ARINC-429, MIL-STD-1553B



Model	MDO5004	MDO3504	MDO2504	
Bandwidth	500MHz	350MHz	250MHz	
Rise time	≤ 0.7ns	≤ 1ns	≤ 1.4ns	
Analog channels	4CH			
Sampling rate	3GSa/s			
Memory depth	360Mpts			
Waveform capture rate	230,000 wfms/s			
Vertical resolution	8bit			
Noise	< 90µVrms			
Interfaces	USB 3.0 Host, USB type-C, LAN, HDMI, Trigger out			
Display	14" TFT LCD touch screen, 1920*1200 resolution			
Bus decoding (std.)		400*280*35.8mm / 4.3kg		



## **Tablet Oscilloscope ETO Series**

The ETO series of flat oscilloscopes is a high-end, professional, portable oscilloscope designed for both laboratory and field testing needs. Equipped with a large 13500mAh battery, it meets the dual requirements of portability and endurance. With a standard VESA interface for easy wall mounting, a 14-inch full-touchscreen with a 1920\*1200 resolution, and the exclusive SigtestUI professional testing instrument system, the ETO series provides an immersive oscilloscope operation experience. It features up to 500MHz bandwidth, 3GSa/ s real-time sampling rate, 360Mpts memory depth, and a waveform capture rate of 230,000 waveforms per second. It has a rich set of interfaces including HDMI and USB, supports Wi-Fi, and is compatible with mobile APP, PC software, and SCPI control. A standard remote control is included for convenient remote operation. It comes with decoding for 8 types of serial bus protocols, FFT data analysis, and comprehensive measurement and statistical functions, making it suitable for most measurement needs of electronic engineers.





## **Key Performance Indicators**

- 4 analog channels
- 360Mpts memory depth
- 13500mAh Li-ion battery
- Intuitive user interface
- Support wireless remote control
- ▶ High pass, Low pass bandwidth filter
- Segmented storage function (10,000 events)
- Advanced math and FFT functions

- ▶ 350MHz or 500MHz options available
- ▶ 3GSa/s sampling rate
- ▶ 14" touch screen, 1920 x 1200 resolution
- ▶ Built-in large battery, easy for lab and field using
- ► Mic-OPI <sup>TM</sup> probe interface, auto probe compensation
- Support mobile, PC remote control and SCPI commands
- ► 32G internal storage to store big data
- ► Standard RS-232/422/485/UART, CAN, CAN FD, LIN, SPI, I2C, and ARINC-429, MIL-STD-1553B serial decode



## **Features**



 Built-in large-capacity battery, perfect to use in the field. Special power lock designprevents accidental startup.

#### **Remote control**



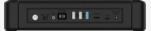
 Support remote control via PC, mobile app, and HDMI screen projection. Support SCPI programming commands, helping engineers to conduct tests more flexibly and efficiently.

#### **VESA mounting**



 75mm x 75mm standard VESA connector compatible with various wall mounts.

#### Various interfaces



 Power button, ground plug, probe calibration output, USB 3.0/2.0, HDMI,USB-C, charging port, power lock.

# Mic-OPI ™ probe interface

Mic-OPI ™ interface performs automatic probe compensation and calibration,standard BNC adapters help to connect with all BNC probes.

## **Key Specifications**

Model	ETO5004	ETO3504		
Model	500MHz	350MHz		
Analog channels	40	СН		
Sampling rate	3GSa/s			
Memory depth	360Mpts			
Waveform capture rate	230,000 wfms/s			
Noise	< 90µVrms			
Vertical resolution	8bit			
Trigger types	Edge, Pulse Width, Logic, Nth Edge, Runt, Slope, Time Out, Video, Serial			
Bus decoding	RS-232/422/485/UART, CAN, CAN	FD, LIN, SPI, I <sup>2</sup> C, ARINC429, 1553B		
Interfaces	USB 3.0/2.0 Host, USB type-C, Ground, HDMI, Trigger out			
Display	14" integrated TFT LCD screen, 1920*1200 resolution			
Battery	7.4V/13500mAh Li-ion Battery			
Dimensions / Net weight	353*245*56mm/3	.6kg (with battery)		

# **Tablet Oscilloscope TO Series**

- ▶ 100MHz to 300MHz bandwidth
- ▶ 1GSa/s to 2GSa/s sampling rate
- 110Mpts to 220Mpts memory depth
- ▶ 10.1" Integrated Touchscreen
- ▶ 7500mAh Li-ion Battery
- 2/4 Analog Channels











# **Tablet Oscilloscope STO Series**

- 2/4 Analog Channels
- 70Mpts Memory Depth
- ► 7500mAH Li-ion Battery

- ▶ 100~200MHz Bandwidth
- ▶ 1 GSa/s Sampling Rate
- ▶ 8" Capacitive Touchscreen

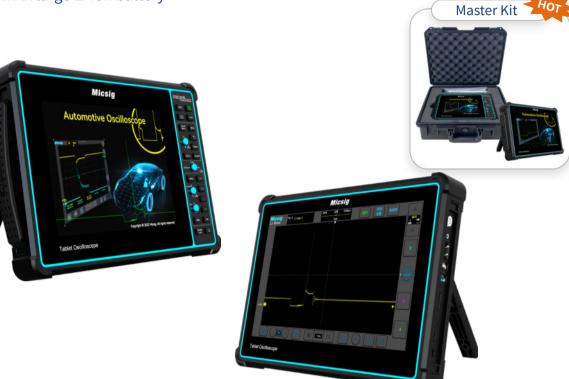


Model	STO1004	STO2002		
Bandwidth	100MHz	200MHz		
Analog Channels	≤ 3.5ns	≤ 1.75ns		
Rise time	4	2		
Sampling Rate (Max.)	1GSa/s			
Memory Depth	70Mpts			
Waveform Capture Rate (Max.)	130,000 wfms/s			
Vertical resolution	8bit			
Bandwidth Filter	20MHz, High Pass, Low Pass (to 30KHz)			
Interfaces	Wi-Fi, USB 3.0/2.0 Hos, USB Type-C, HDMI, Trigger out			
Display	Industrial 8" TFT-LCD (800*600), 14*10 divisions			
Dimension / Net Weight	265*192*50mm / 1.9kg (with battery)			
Battery	7.4V, 7500r	mAh, Li-ion		



# **Automotive Oscilloscope SATO / ATO Series**

- Professional automotive diagnostic presets
- Support measurements for all vehicles
- ▶ Built-in 7500mAh large Li-ion battery
- Compact portable design, best for field work
- ► Robust oscilloscope functions



Model	SATO1004	SATO2002	ATO1004	ATO2002	ATO2004	ATO3004
Bandwidth	100MHz	200MHz	100MHz	200MHz	200MHz	300MHz
Analog Channels	4	2	4	2	4	4
Sampling Rate	1GS	Sa/s	1GS	Sa/s	2GS	Sa/s
Memory Depth	70M	lpts	110	Mpts	2201	Mpts
Waveform Capture Rate (Max.)	130,000	wfms/s	78,000	wfms/s	300,000 wfms/s	
Bandwidth Filter		High Pass, Low Pass (to 30KHz) High Pass, Low Pass (to 3				
Segmented storage	Not support					port
Vertical resolution		8bit				
Support tests	Chargin	Charging Circuits, Starter Circuits, Sensors, Actuators, Ignition, Networks (CAN, CAN FD, LIN, Flexray, K line), Combination test, Pressure test (ATO series only)				
Interfaces		Wi-Fi, USB 3.0/2.0 Host, USB type-C, Grounding, HDMI, Trigger out				
Display	8" TFT-LCD, 800*600 pixel 10.1" TFT-LCD, 1280*800 pixel					
Dimension / Net Weight	265*192*50mm / 1.9kg (with battery)					
Battery	7.4V, 7500mAh Li-ion					



## **Features**

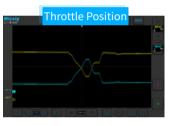
- Comprehensive auto diagnostic presets
- Powerful signal capture and analysis capability
- Various sensors / Actuators / CAN / LIN / Flexray / Ignitions
- Convenient storage: waveform/save pictures / video recording
- Portable design with all-in-one functions
- The battery life can reach up to 5 hours (depending on the power consumption of different models and the existence of battery wear and tear).
- HDMI function for training & education
- Life-long free software online update

## **References**









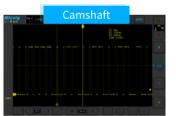


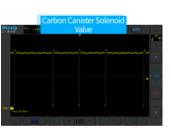


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power cord

power adapter





## **Standard Kit**





2 x Alligator clips/pair



Battery (built-in)

2 x soft pin probe/pair



#### screen protector

## **Master Kit**





# Android Oscilloscope VTO Series Automotive Oscilloscope VATO Series

- 200MHz Bandwidth
- 50Mpts Storage Depth
- Supports CAN and LIN Bus Decoding
- Compatible with any Android device
- ▶ 1GSa/s sampling rate
- 4 Channels
- Built-in battery for day-long use
- ► Automotive-diagnostic functions VATO



\*The VATO series adds automotive diagnostic accessories to the VTO oscilloscope, including 4 alligator clips, 4 probes, 4 BNC to banana plug cables, and an automotive diagnostic software package.

Model	VTO2004	VATO2004		
Bandwidth	200MHz			
Analog channels	4			
Rise Time	≤ 1.8ns			
Real-time sampling rate	1GSa/s			
Memory Depth	50Mpts			
DC Gain Accuracy	≤ 2%			
Input Impedance	1MΩ±1%    14pF			
Vertical resolution	8bit			
Power supply	DC 12V			
Battery	7.4V, 7500mAh Lithium-ion battery			
Dimensions	140*215*52mm			
Net Weight	640g			
Software package	General-purpose oscilloscope	Automotive Oscilloscope		

# SigOFIT <sup>™</sup> Optical-fiber Isolated Probe Power-Over-Fiber Complete Isolation

### No battery, powered by mains, enabling uninterrupted testing for 365 days

# **Best probe for SiC and GaN test**

Based on Micsig's exclusive SigOFIT <sup>™</sup> technology, the SigOFIT probe is powered by laser, delivers extremely high CMRR and isolation voltage, unveils the whole truth of the signal within bandwidth. In addition, the SigOFIT optically isolated probe utilizes advanced laser power supply technology, perfectly solving the problem of isolated power supply.

## **Applications**

When there is doubt about the accuracy and authenticity of the measurements taken by other voltage probes, the SigOFIT optically isolated probe can serve as the ultimate reference for arbitration.

- Power supply assessment and EMI/ESD troubleshooting
- Motor and power supply design
- GaN, SiC, IGBT device design and analysis
- High-voltage, high-bandwidth safety isolation testing
- Inverter, UPS, and SMPS testing
- Wide-range voltage and bandwidth testing
- Floating ground testing





## **Product Features**

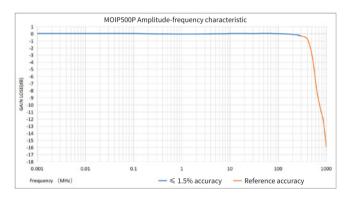


#### **Present True Signal**

• SigOFIT probe delivers highest CMRR: over 128dB at 100MHz, up to 108dB at 1GHz. It's the ultimate referee of signal fidelity measured by other voltage probes.

#### **Best Probe for Third-Gen Semiconductor**

• Power device like SiC and GaN can switch high voltages in a few nanoseconds, containing very high-energy highfrequency harmonics. Even at the highest bandwidth, the SigOFIT probe still have over 100dB CMRR in max. bandwidth, perfectly suppress oscillation caused by high- frequency common-mode noise, it's the best choice for third-generation semiconductor test and measurement.



## Highest AccuracySigOFIT probe has excel

 SigOFIT probe has excellent amplitude-frequency characteristics. DC gain accuracy ≤ 1%, while noise ≤ 0.45mVrms. Zero drift <0.1% (works 5 mins later), gain drift also <1%.</li>

#### Safe to Test Gallium Nitride (GaN)

• The test leads of SigOFIT probe are short and with coaxial cable transmission, the input capacitance is as low as 1pF minimum, very safe to test GaN.

#### Wide Measurement Range

• Unlike traditional differential probes can only test high-voltage signals, SigOFIT probe can be used with different attenuator tips to test differential mode signals from  $\pm 0.01V$  to  $\pm 6250V$ , achieve full-range output and very high signal-to-noise ratio.

#### **Compact & Simple**

• Smaller size than traditional differential probes, more accurate probe tips, makes it much easier and flexible to use.

20X/50X/100X/200X/1000X/2000X/5000X/10000X

#### **Efficient & Affordable**

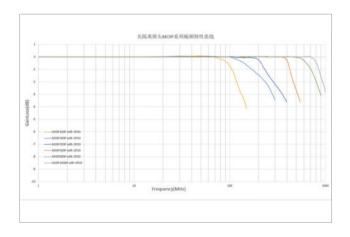
• Fastest response, can be tested immediately after power-on, Auto Calibration in less than 1 second, ensures accurate signal output in real time.



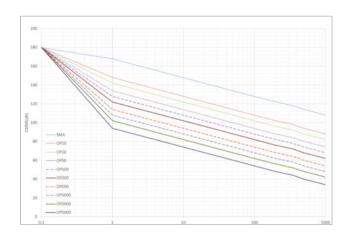


## **Key Specifications**

Mode	MOIP100P	MOIP200P	MOIP350P	MOIP500P	MOIP800P	MOIP1000P
Bandwidth	100MHz	200MHz	350MHz	500MHz	800MHz	1GHz
Rise Time	≤ 3.5ns	≤ 1.75ns	≤ 1ns	≤ 700ps	≤ 438ps	≤ 350ps
CMRR	DC: 180dB 100MHz: 128dB	DC: 180dB 200MHz: 122dB	DC: 180dB 350MHz: 118dB	DC: 180dB 500MHz: 114dB	DC: 180dB 800MHz: 110dB	DC: 180dB 1GHz: 108dB
Differential Voltage Range		±6250V			±5000V	
Differential Voltage Range	<b>Standard OP20(MMCX), ±25V</b> Optional OP50(MMCX), ±62.5V Optional OP200(MCX), ±250V Optional OP1000(MCX), ±1250V Optional OP2000(MCX), ±2500V Optional OP5000(LCX), ±6250V		Standard OP20(MMCX),±25V Optional OP50(MMCX), ±62.5V Optional OP200(MCX), ±250V Standard OP1000(MCX),±1250V Optional OP2000(MCX),±2500V Optional OP5000(LCX),±6250V	Optional OP20(MMCX),±10V Standard OP50(MMCX),±25V Optional OP100(MMCX),±50V Standard OP2000(MCX),±1000V Optional OP5000(MCX),±2500V Optional OP10000(LCX),±5000V		±25V ±50V ±1000V 2500V
Noise	< 0.45mVrms					
DC Gain Accuracy	1%					
Common Mode Voltage Range	85kVpk					
Interface		Standard BNC				



Amplitude-frequency characteristics of different SigOFIT probes



 ${\sf CMRR}$  of different types of attenuators (0dB) at various frequencies.



# High Voltage Differential Probe DP Series

The DP series differential probes feature a bandwidth from 100MHz to 500MHz and can measure up to 7000Vpk differential voltage. They utilize advanced optical isolation technology for low noise and excellent common-mode rejection. With a standard BNC interface, they're compatible with all oscilloscopes. The probes are made of metal for better interference resistance and are only 2 cm thick for a compact design. They offer quick zeroing, overload protection, and settings preservation. The probes have a 2% accuracy and dual-range selection for various voltages. They also have a high input impedance (>8M $\Omega$ ) and low input capacitance (<3pF) for safety testing. A 5MHz bandwidth limiter helps in filtering out noise for precise measurements, making them suitable for a wide range of high-voltage and high-frequency applications.



- ► 100MHz-500MHz bandwidth, 7000Vpk differential voltage
- ▶ Low noise, high-impedance, compliant with safety standards
- > 2 cm thick, metal, anti-interference

- Outstanding frequency response, superior CMRR
- Quick zero, overload alert, settings saved
- ► BNC, fits all oscilloscopes



## **Key Specifications**

Max. input differential voltage (DC+AC PK)	70V (20X) 700V (200X)	150V (50X) 1500V (500X)	300V (100X) 3000V (1000X)	700V (100X) 7000V (1000X)	
Bandwidth / Model					CMRR
100MHz	DP700	DP1500	DP3000	DP7000	DC: > -80dB
150MHz	DP701	DP1501	DP3001	1	100kHz: > -60dB 10MHz: > -30dB
200MHz	DP702	DP1502	DP3002	1	100MHz: > -26dB
300MHz	DP703	DP1503	DP3003	1	DC:>-80dB
400MHz	DP704	DP1504	DP3004	1	100kHz:>-70dB 20MHz:>-40dB
500MHz	DP705	DP1505	DP3005	1	120MHz:>-26dB

\* Previous DP10007 upgraded to DP700

\* Previous DP10013 upgraded to DP1500

\* Previous DP20003 upgraded to DP3000

Note: These models have been enhanced in performance (see the specification table for details) and have an all-new, more compact and refined design. Please process orders according to the new model numbers when placing orders for procurement.

Other Specifications	
Accuracy	±2%
Power supply	DC 5V
Overload alarm	LED flashes, Buzzer beeps
Size	Control module: 91*33*15mm (L*W*H) Signal module: 100*36*20mm (L*W*H)
Input Cable Length	Approx 8 cm
Output Cable Length	Approx 120 cm
Temperature	working: 0°C ~ 40 °C non-working: -30°C ~ 70 °C
Humidity	working: 5 ~ 85% RH ( 0°C ~ 40 °C) non-working: 5% ~ 85% RH (≤ 40 °C) ; 5% ~ 45% RH (40 °C ~70 °C)



# **Rogowski AC Current Probe RCP Series**

The RCP series Rogowski coils has a bandwidth of up to 30MHz and can measure up to 6000A peak current. They feature a 1kVrms voltage rating and near-zero insertion impedance to reduce measurement interference. With a 1.6mm coil diameter, they're easy to use with TO-220 semiconductors. These probes offer 2% accuracy for high-frequency, high-current signal measurements, ideal for third-generation semiconductor testing and monitoring semiconductor switch currents.



- Up to 30MHz bandwidth
- ► Typical accuracy up to 2%
- Output noise: <5mVpp</p>
- Maximum measurable current up to 6000A peak
- Coil cross-sectional diameter approximately 1.6mm
- ▶ BNC interface, compatible with all oscilloscope brands



## **Product Features**

### **Smaller coil cross-section**

The cross-sectional diameter of the coil is only 1.6mm, allow engineers measure current in most difficult-toreach parts of the circuit, such as TO-220, TO-47.



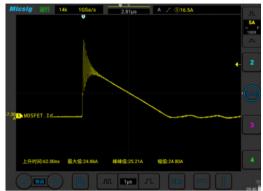
## Application

- Measure currents in motor drives such as VSDs, UPS, and SMPS for power quality analysis.
- Test MOSFETs and IGBTs made of SiC, GaN in double- pulse tests.
- Monitor currents in small inductors, capacitors, and damping circuits.
- Measure load and harmonic currents in power electronics.
- Measure small AC currents in the presence of large DC currents.
- Measure high-frequency sine wave, pulse, or transient currents.
- Measure AC currents in three-phase power systems.
- Measure power losses in semiconductors.
- Measure 50/60Hz utility frequency currents.
- Develop and diagnose power converters.

## **Key Specifications**

## Measure the Id current of MOSFET

Excellent high-frequency measurement capabilities, easily measures high-speed signals, able to observe HF harmonic components when measuring the Id current of MOSFET (as shown the oscillation section below).





Model	RCP60XS	RCP300XS	RCP600XS	RCP1200XS	RCP3000XS	RCP6000XS
Bandwidth	85Hz-30MHz	10Hz-30MHz	10Hz-30MHz	12Hz-30MHz	3Hz-30MHz	2Hz-30MHz
Peak current	60Apk	300Apk	600Apk	1200Apk	3000Apk	6000Apk
Output sensitivity	100mV/A (10X)	20mV/A (50X)	10mV/A (100X)	5mV/A (200X)	2mV/A (500X)	1mV(1000X)
Accuracy (typical)	2%	2%	2%	2%	2%	2%
Peak di/dt	4kA/µs	20kA/µs	40kA/µs	70kA/µs	70kA/µs	70kA/μs
Droop	65%/ms	9%/ms	6%/ms	3%/ms	2%/ms	2%/ms
Output Noise	<20mVpp	<18mVpp	<12mVpp	<5mVpp	<5mVpp	<5mVpp
Peak coil isolation voltage	AC 1kVrms (1min) (50Hz/60Hz) (Rogowski coil part only)					
Wire length (integrator to Rogowski coil)	1.5m (customizable)					
Coil inner diameter	25mm (customizable)					
Coil circumference	80mm (customizable)					
Coil cross-section diameter	Appx. 1.6mm					
Interface	1MΩ BNC					

# **High Frequency AC/DC Current Probe CP series**

The CP series current probes has a bandwidth of up to 100MHz, dual 5A/30A ranges, and measure up to 30A continuous or 50A peak currents with 1% accuracy and 1mA resolution. They offer high SNR, one-click demagnetization and zeroing, and overload protection for precise current waveform capture. The probes are compact, easy to use, and have a standard BNC interface for all oscilloscopes.



- ▶ 50MHz or 100MHz bandwidth options available
- ► Dual range design of 5A/30A
- Clamp diameter of 5mm

▶ 1% accuracy, 1mA resolution, high SNR

MCS

- One-click demagnetization and zeroing
- BNC, fits all oscilloscopes

Model	СР503В	CP1003B		
Bandwidth	DC-50MHz	DC-100MHz		
Rise Time	≤ 7ns	≤ 3.5ns		
Range	5Arms 30Arms			
Max. Current Input	50Apk, 100Ap	ok-pk,30Arms		
Accuracy (Max continuous current @ DC and 45-66Hz)	±1% ±1mA (5A) ±1% ±10mA (30A)			
Resolution	1mA (5A) 10mA (30A)			
Noise	< 4mAr < 30mAr			
Delay	< 6.5n < 8.5ns			
Output Sensitivity	1V/1A ( 1V/10A (3			
Over-current alarm value	> 5Apk (5A) > 50Apk (30A)			
Power Supply	1	2V		
Max. Working Voltage	CAT	1 300V		
Max. Floating Voltage	CAT I 300V			
Max. Conductor Diameter	5r	nm		

# Low Frequency AC/DC Current Probe CP2100 series

The CP2100 series current probes have bandwidths of 800kHz, or 2.5MHz, measuring up to 100A peak with a switchable 10A/100A range. They offer auto/manual zeroing and a compact, robust design. With a 13mm max conductor size and USB power, they connect directly to oscilloscopes via BNC, compatible with all brands, and are ideal for motor drives, inverters, and avionics.



- ▶ 800kHz-2.5MHz bandwidth options
- Auto/manual zeroing available
- Compact split design

- Switchable 10A/100A ranges
- BNC, fits all oscilloscopes

#### Max conductor diameter up to 13mm

1 1 0		·	
Model	CP2100A	CP2100B	
Bandwidth	DC~800kHz	DC~2.5MHz	
Rise time	≤ 437.5ns	≤ 140ns	
Range	10A/100A		
Output sensitivity	0.1V/A (10A) 0.01V/A (100A)		
DC accuracy (typical)	3%±50mA (10A) 4%±50mA (100A, 500mA~40Apk) 15% (100A, 40Apk~100Apk)		
Measuring range	50mA~10Apk (10A) 1A~100Apk (100A)		
Max measurable current	100Apk, 70.7Arms (DC+ACpk) 200Apk-pk, 70.7Arms (AC)		
Max working voltage	CAT III 300V CAT II 600V		
Max float voltage	CAT III 300V CAT II 600V		
Max conductor diameter	13mm		
Overload indication	Buzzer beeps and Button light flashes		
Supplied power	DC 5V		
Probe head size	11*6.1*2.5cm		
Control module size	10.8*5.6*2.6cm		
Total Length	228cm		



# **AC Current Probe ACP1000**

The ACP1000 AC current probe covers a bandwidth from 10Hz to 100kHz, measures up to 1000A with 1% accuracy, and uses a standard BNC interface for all oscilloscopes. It offers switchable ranges of 10A/100A/1000A with a 52mm clamp for non-intrusive measurements. Portable and no external power needed, it's ideal for motor drives, inverters, power supplies, and avionics.



- ▶ Bandwidth range from 10Hz to 100kHz
- Switchable 10A/100A/1000A ranges

Clamp design for continuous circuit testing

Maximum test current up to 1000A

Accuracy up to 1%

► BNC, fits all oscilloscopes

Model	Input current (A)	Output signal	Frequency (Hz)	Rated load (Ohms)	Accuracy level
ACP1000	0.1-10A	100mV/A	10Hz-100kHz	≥100kΩ	3%±10mV
	0.1-100A	10mV/A			2%±5mV
	1-1000A	1mV/A			1%±1mV

Other Specifications		
Current range	0.1A-1000A	
Max. pulse current	2000A (2s)	
Working frequency	10Hz-100kHz	
Accuracy (typical)	1%	
Safety Level	CAT III 600V	
Jaw diameter	52mm	
Dimensions	111*216*45mm	





# ABOUTTablet Oscilloscope CreatorUSOptical-isolated Probe Leader

Shenzhen Micsig Technology Co., Ltd. is an industry-leading manufacturer and solution provider of signal test and measurement equipment, committed to the R&D of cutting-edge technologies in the field of oscilloscopes and peripheral products for 20 years, we have always been at the forefront of innovation and owned lots of technical patents and software copyrights.

Each of our innovations aims to break through the technical boundaries and explore new possibilities for industry development trends.

We created world-first full-touch tablet oscilloscope, smooth performance and ultimate user experience shocked the industry.

We launched the pioneering SigtestUI <sup>™</sup>, the only testing platform in the industry specifically designed for test and measurement instruments, making professional instruments lighter, smarter, and more stable.

We independently developed the SigOFIT <sup>™</sup> technology, released industry-leading optical-fiber isolated probe and high-bandwidth high-voltage differential probe, brings a qualitative leap to the industry, making 3rd-Gen power semiconductors test no longer difficult.

We strive to serving global users with "Micsig Creation", keep building on value, constantly surpass ourselves and pursue excellence.







## Micsig

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