High Resolution Oscilloscope MHO6 Series

The MHO high-resolution oscilloscope 6 series features a 1GHz bandwidth, 6GSa/s sampling rate, 8 analog channels, a storage depth of 1800 million points (Mpts), and a 12-bit vertical resolution. Its high bandwidth and 8-channel capability are suitable for faster circuit analysis and more synchronized signal testing. Its ultra-thin design of 3.52 cm can save a lot of your precious desk space; a 16-inch touch screen with a resolution of 1920*1200 provides you with a super clear waveform display for a more comfortable visual experience.

Bandwidth	Real-time Sampling Rate	Analog Channels	Vertical Resolution
350MHz-1GHz	6GSa/s	8Ch	12bit

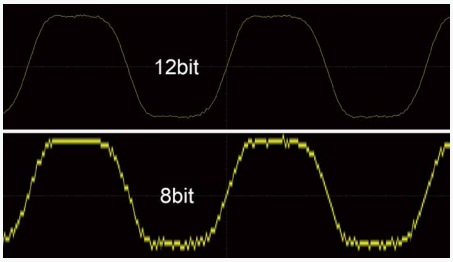
Memory Depth	Display	Ultra-thin Design
1800Mpts	16", 1920*1200	3.52cm

Key Performance Indicators

- 350MHz, 500MHz or 1GHz options available
- 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, I²C, ARINC-429, MIL-STD-1553B
- 6GSa/s sampling rate, 1800Mpts memory depth
- 12-bit vertical resolution
- 16-inch 2K High-Definition Touch Screen Display
- Ultra-friendly UI, learn to use in 5 minutes
- Mic-OPI™ patented probe interface, automatic probe calibration
- Mobile APP, PC remote control, SCPI commands
- 256G internal storage to save large data

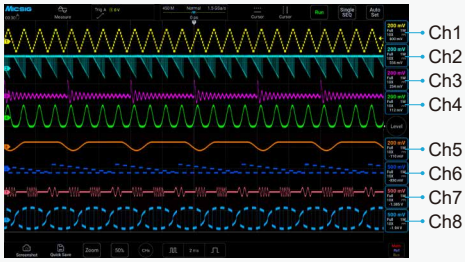
Features

Outstanding Performance Precise Insight



The MHO 6 series oscilloscopes utilize high-precision 12-bit high-speed ADC technology with a sampling rate up to 6Gsa/s. Combined with meticulous circuit design and advanced signal processing techniques, they achieve comprehensive capture and stable analysis of signals ranging from weak to high-speed, providing solid assurance for high-precision testing in fields such as scientific research, production, and education. Their maximum analog bandwidth reaches 1GHz, easily meeting the testing challenges of the most cutting-edge devices in the field of power electronics.

Multi-Channel Parallelism Efficiency Upgraded



Equipped with 8 analog channels, the MHO 6 series oscilloscopes enable engineers to simultaneously observe and analyze up to 8 test points, greatly enhancing testing efficiency and accuracy. This provides strong support for timing analysis, trouble-shooting, and performance optimization of complex systems.

Outstanding Display

Featuring a 16-inch high-definition touch screen with a resolution of up to 1920*1200, it delivers a delicate and clear visual experience. The ultra-thin body design, with a thickness of only 3.52cm, is both portable and aesthetically pleasing, making every operation a pleasure.

Complete Connectivity

Standard with BNC adapter; also has USB 3.0 Host, USB Type-C, LAN, HDMI etc...

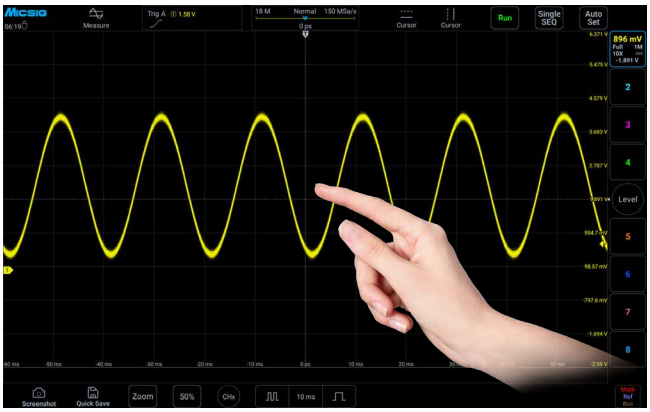
Comprehensive Selection of Probes

Based on Micsig's comprehensive probe product line, the MHO6 series oscilloscopes can be paired with SigOFIT Optical-fiber Isolated Probe, high-voltage differential probes, Rogowski coils, and high-frequency AC/DC current probes, among others. Each of these probes has its own unique features, capable of flexibly adapting to various testing scenarios, providing a complete and reliable solution for power electronics testing.

Key Specifications

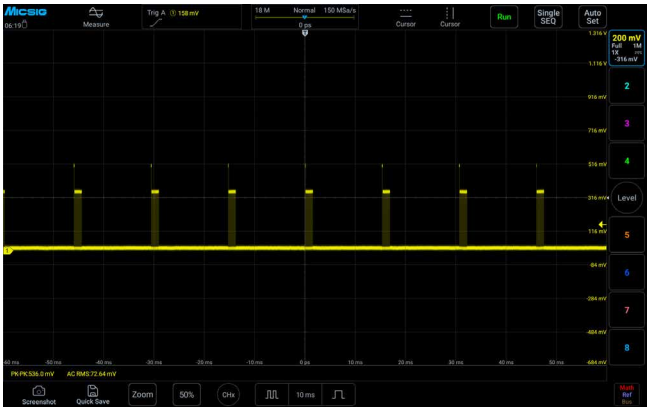
Model	MHO68-1000	MHO68-500	MHO68-350
Bandwidth	1GHz	500MHz	350MHz
Rise Time	≤ 0.4ns	≤ 0.7ns	≤ 1ns
Vertical Resolution	12bit		
Analog Channels	8		
Real-time Sampling Rate	6GSa/s		
Memory Depth	1.8Gpts		
Input Impedance	50Ω / 1MΩ		
Display	16" full touch display, 1920 x 1200 resolution		
Dimension	44.3*30.7*3.52cm		

Functions



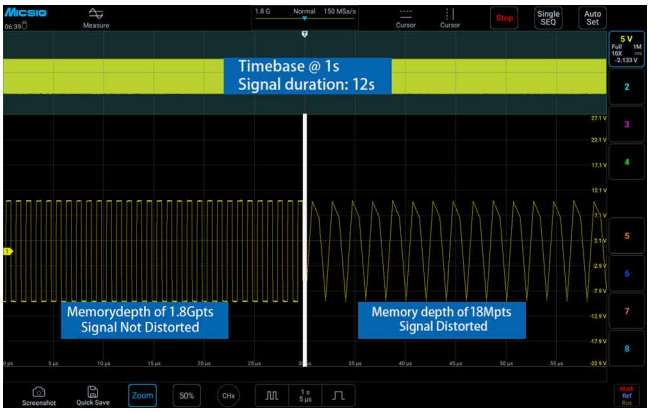
Smooth Touch Control

16" full-touch integrated display, all operations can be completed by touch, more intuitive and efficient than ever before. With accumulation of 10 years of UI design experience, the MHO6 series simplifies all user interfaces, engineers can quickly learn to use in 5 minutes.



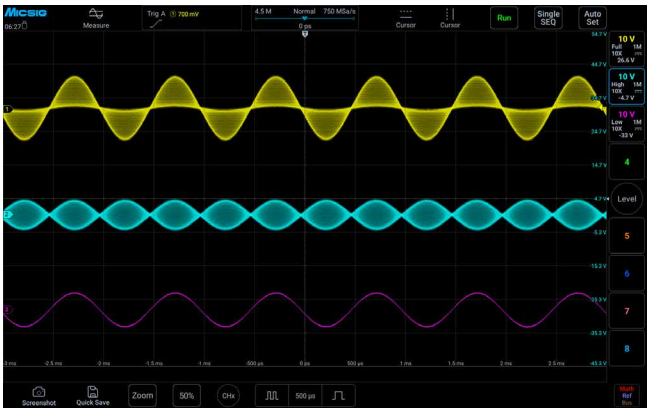
Segmented Storage Acquisition

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



Deep Memory

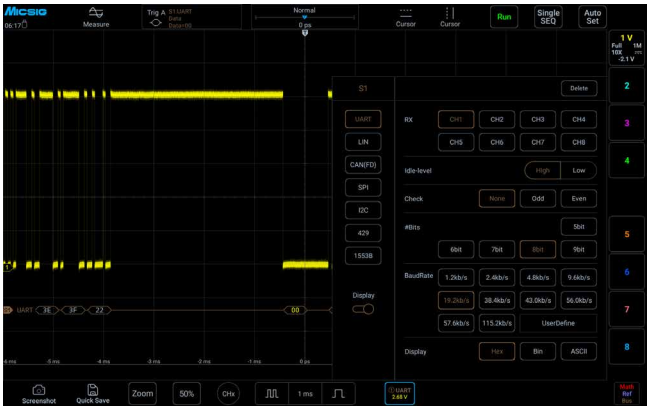
Insufficient memory depth often leads to distortion when long time-base signals were expanded. With memory depth of up to 1800Mpts, there is no reduction in performance even with two channels opened at the same time. The signals will still maintain excellent fidelity even at long period of time.



Full bandwidth High pass Low pass

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.

Diverse File Saving

Users can save waveforms and measurement results as binary (BIN) or CSV format files for data analysis using Matlab or Excel. Also support saved as WAV format, direct open & analysis inside the oscilloscope. Additionally, user can save waveforms as images or record videos.